SANYO

SANYO
STEREO
CASSETTE DECK
RD 4545
SERVICE MANUAL

SPECIFICATIONS

Tape Speed:	1-7/8 IPS. ±1.0%	**Closs Talk:**	Better than 60 dB (track to track)
Fast Forward Time:	90 ~ 110 sec. (c-60 cassette)		Better than 30 dB (chl. to chl.)
Rewind Time:	90 ~ 110 sec. (c-60 cassette)	**Signal to Noise Ratio:**	Better than 50 dB DOLBY NR IN. WTD (CCIR) or DIN
Wow & Fulutter:	0.07% RMS. (LIMIT)	**Hum & Noise:**	Less than 3 mV
Terminal Impedance:	MIC. 10K ohm	**Frequency Responce:**	30 ~ 14KHz R/P (CrO_2)
	LINE IN 100K ohm	**Power-Consumption:**	22 W
	DIN INPUT 2.2K ohm		
	LINE OUT 5.6K ohm		
	DIN OUT 80 ohm		

ADJUSTMENT

PRIOR TO MECHANICAL ADJUSTMENT

The surfaces of the tape-contacting and revolving parts (pulleys and belts) should be kept clean. Wipe off grease and oil stains, using alcohol.

ADJUSTING HEAD POSITIONS

Set the unit in the PLAY mode after putting into it the special jig for adjusting the head positions, or a jig similar to the one shown in the illustration.

- The distances from the reference holes to the heads should be as shown in the illustration:
  To R/P head 3.35 ±0.2mm
  To erase head 3.5 ±0.2mm

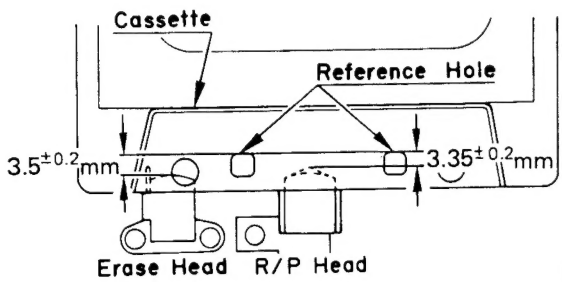


Fig. 1

- Loosen the screws fastening the bracket stopper. Then, move it until the R/P head comes to its proper position.

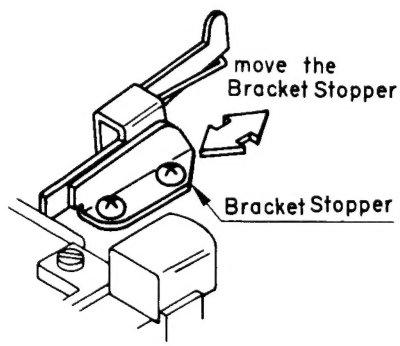


Fig. 2

- Loosen the screws fastening the erase head and adjust its position.
- After each adjustment, tighten the erase head screws and secure them by applying screw lock.

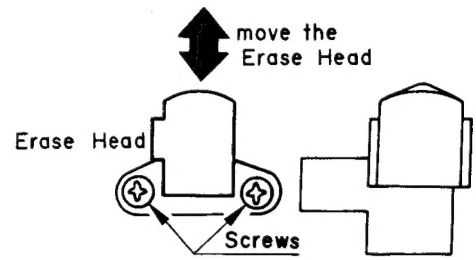


Fig. 3

ADJUSTING SWITCH (S702, S708, S306) POSITIONS

- Push the PLAY button gradually and make sure that S702 and S708 are switched before S306.
- Each switch can be adjusted after loosening its screws.
- After adjusting each switch, tighten its screws and secure them by applying screw lock.

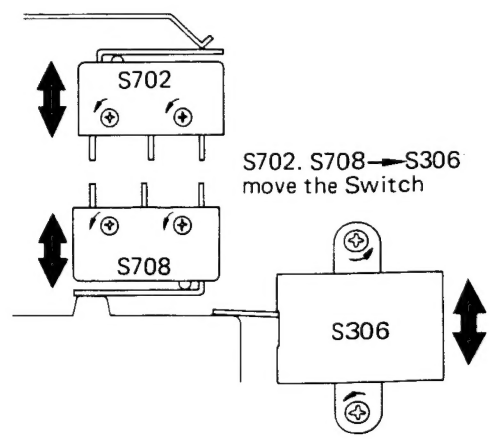


Fig. 4

ADJUSTING SWITCH (S111) POSITION

- Push the RECORD button slowly and make sure that the RECORD/PLAY switch works before S111.
- Loosen the screws fastening the bracket switch and adjust its position as shown.
  After adjustment, there should be a clearance of more than 0.5mm between the switch (S111) actuator and the switch unit.

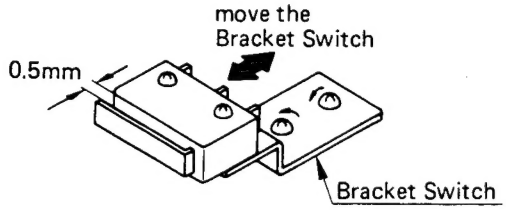


Fig. 5

- After each adjustment, tighten the bracket switch screws and apply screw lock to secure them.

ADJUSTING SWITCH (S701, S705) POSITIONS

- S701 and S705 should be actuated on pushing the PAUSE and REWIND buttons respectively.
- Loosen the screws fastening each switch and adjust its position.

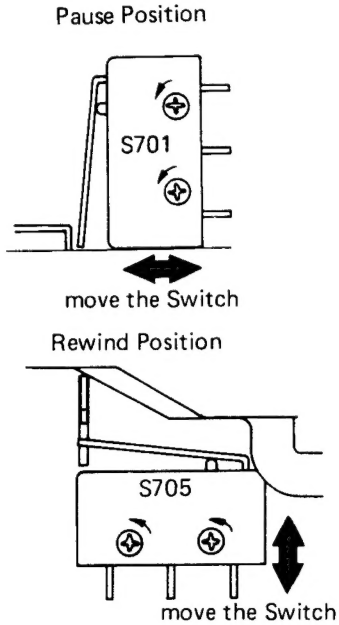


Fig. 6

- After adjustment, tighten the screws fastening the switches and apply screw lock.

TAKE-UP TORQUE

- Measure the take-up torque during playback with a torque gauge. The proper value is 35 to 65 gr-cm.
- If the specified take-up torque is not obtained, replace the take-up reel assembly.

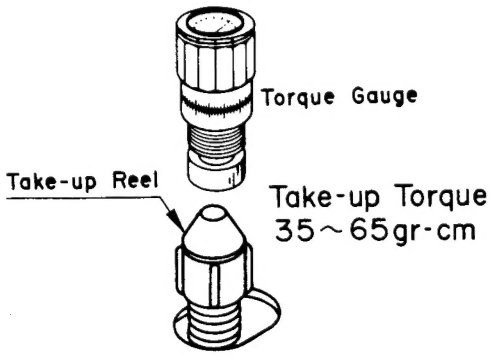


Fig. 7

ADJUSTING FULL AUTO STOP SYSTEM

- With the unit in the recording mode, the FULL AUTO STOP system should shut off power on supplying DC 18V from the constant voltage regulator to the plunger through the circuit shown in the illustration.

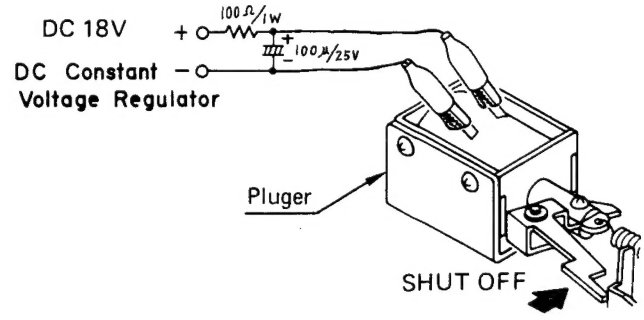


Fig. 8

- Make necessary adjustment by bending the plate of the SELECT button assembly.

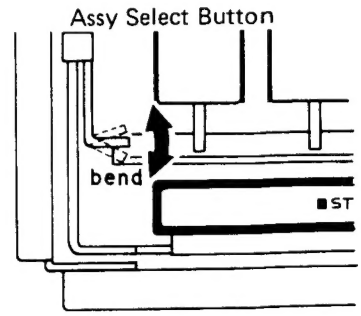


Fig. 9

ADJUSTING REED SWITCH POSITION

- Adjust the magnet so that it becomes identical in heigh with the printed circuit board.

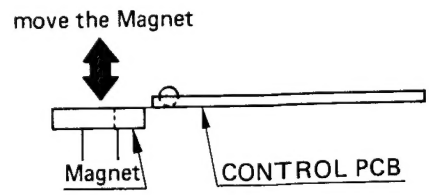


Fig. 1

- Loosen the screws fastening the printed circuit board an adjust its position until there is a clearance of 1.5 to 2.0mn between the reed switch and the magnet.

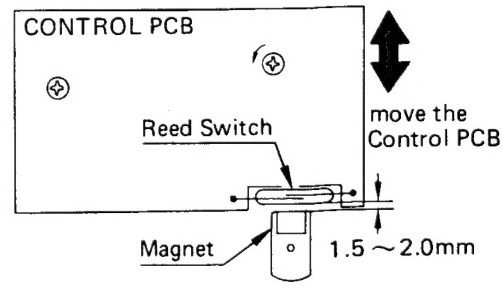


Fig. 1

- After the above adjustment, fasten the PCB screws securely.

ELECTRICAL ADJUSTMENT

SWITCH SETTINGS FOR MAKING ADJUSTMENT

- Unless otherwise specified in the respective sections, set the switches to the following positions:
  - TAPE SELECT SWITCH ..... NORMAL
  - DOLBY NR SWITCH ..... OFF
  - LIMITER SWITCH ..... OFF
  - MONITOR SWITCH ..... SOURCE
  - DOLBY CALIBRATION SWITCH ..... OFF
- For electrical adjustment, use an audio signal generator with an output impedance of 600 ohms.

ADJUSTING TAPE END APPROACHING ALARM TIME

- Turn the adjusting volume P401 counterclockwise until its resistance value becomes maximum.
- Play back C-60 cassette tape with a sufficient length of tape remaining to be played for more than five minutes and measure time from the sounding of the tape end alarm till the end of the tape.
- Adjust the volume P4018 in such a way that it will take two minutes from the sounding of the alarm till the end of the tape.

ADJUSTING TAPE SPEED

- As shown, connect a frequency counter to either the left or the right LINE OUT.

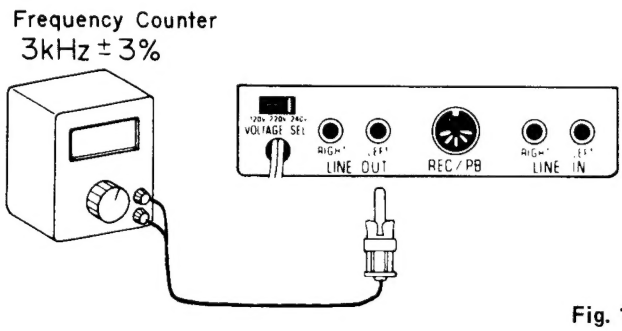


Fig. 12

- Play back 3 kHz test tape. Adjust the volume P501 until the frequency counter reading stands at 3 kHz ±3%.

ADJUSTING AZIMUTH OF R/P HEAD

- Connect a VTVM to LEFT LINE OUT and play 10 kHz test tape for azimuth adjustment.

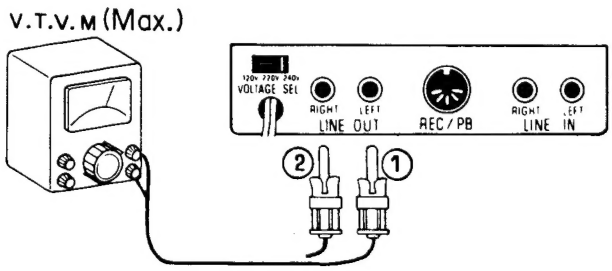


Fig. 13

- Turn the azimuth adjusting screw to the position where the VTVM needle swings to maximum. (No. 1 position)
- Disconnect the VTVM from LEFT LINE OUT and re-connect it to RIGHT LINE OUT. Turn the azimuth screw until the VTVM needle swings to maximum. (No. 2 position)

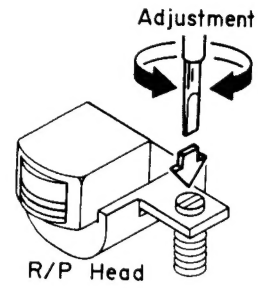


Fig. 14

- Turn the azimuth screw to the center of the Nos. 1 and 2 positions as illustrated. (No. 3 position)

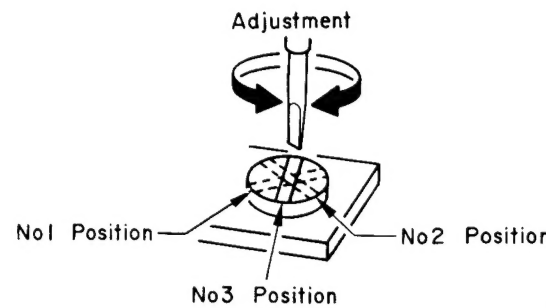


Fig. 15

- After the completion of azimuth adjustment, fix the azimuth screw securely by applying screw lock.

ADJUSTING PLAYBACK FREQUENCY RESPONCE

- As shown in the illustration, connect a VTVM to LEFT LINE OUT and play back a test tape (TEAC MTT-117SP) for checking frequency responce.

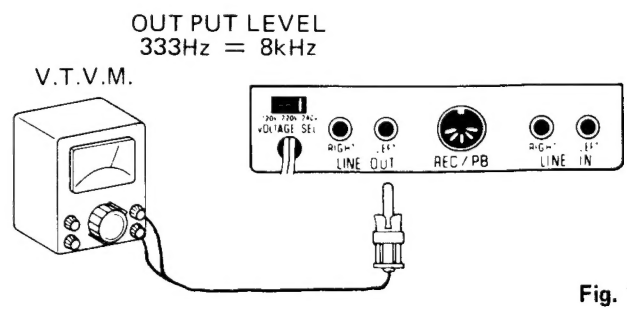


Fig. 16

- Adjust the volume P101 while watching the VTVM needle. The output difference between 333 Hz and 8 kHz signals recorded on the test tape should be less than ±1dB.
- Adjust the volume P201 for the right channel in a similar manner.

ADJUSTING PLAYBACK GAIN

- Connect a VTVM to LEFT LINE OUT as shown and play back Dolby level adjusting tape (TEAC MTT-150).

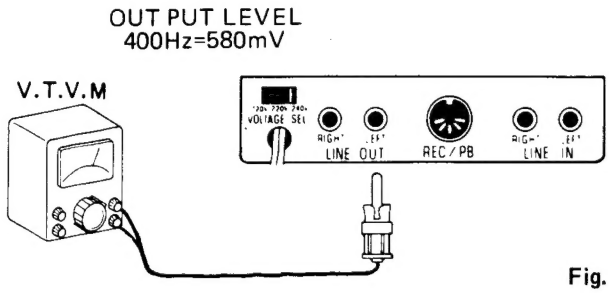


Fig. 17

- Adjust the output of the 400 Hz signal recorded on the tape to become 580 mV ±0.5dB by turning the volume P102 while reading the VTVM.
- Make similar adjustment for the right channel with the volume P202.

ADJUSTING METER

- Connect an audio signal generator (output impedance = 600 ohms) to LEFT LINE IN and a VTVM to LEFT LINE OUT.

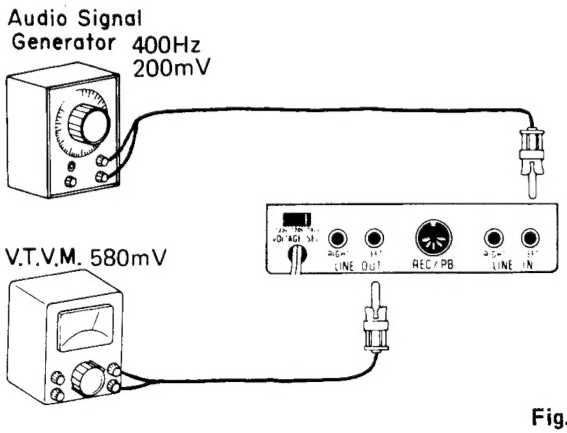


Fig. 18

- Set the audio signal generator output at 400 Hz 200 mV. Set the unit in the recording mode.
- Adjust INPUT VOLUME VR1 until the VTVM reading becomes 580 mV. Then, adjust the volume P103 so that the needle of the left channel meter stands at the middle of the Dolby zone mark.

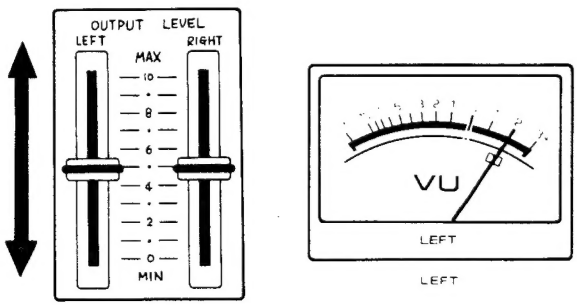


Fig. 19

- Make similar adjustment for the right channel with INPUT VOLUME VR2 and the volume P203.

ADJUSTING RECORDING BIAS

- Turn CALIBRATION VOLs VR5 and VR6 to the center and set the TAPE SELECT switch to CHROME.

Fig. 20

- As shown in the illustration, connect an audio signal generator to LEFT LINE IN and a VTVM to LEFT LINE OUT. After this, mount a chrome tape cassette (BASF TP-18) onto the unit. The output of the audio signal generator should be 400 Hz 200 mV.

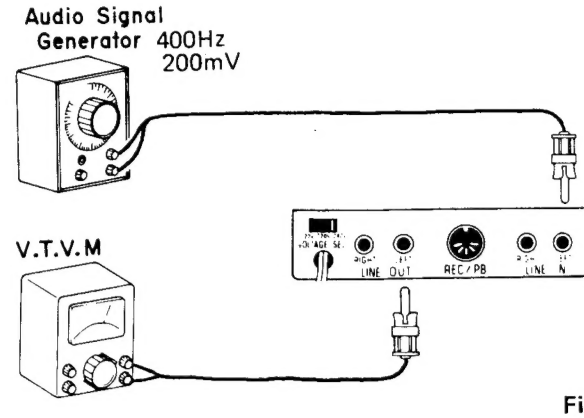


Fig. 21

- Adjust INPUT VOLUME VR1 in such a way that, when recording signals from the audio signal generator, the needle of the left channel meter swings to the center of the Dolby zone mark.

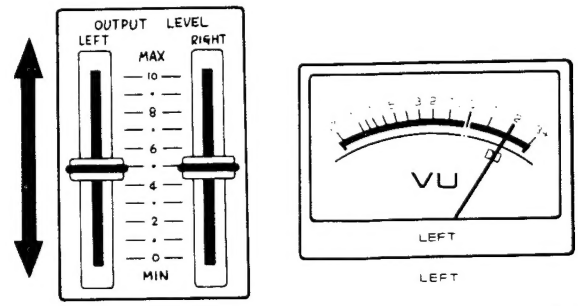


Fig. 22

- Set the MONITOR switch to TAPE. Increase bias current by turning the volume P303. Continue turning the volume until the VTVM reading becomes maximum, from which point it should be reduced by 2dB.

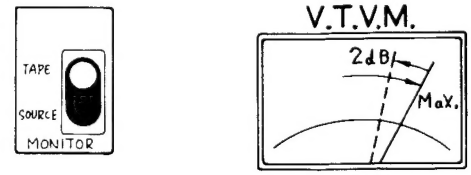
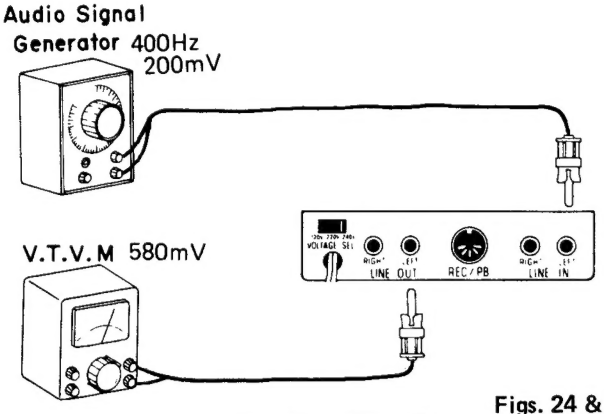


Fig. 23

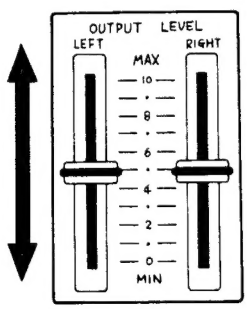
- Make similar adjustment with the right channel with INPUT VOLUME VR2 and the volume P304.

ADJUSTING MONITOR GAIN

- As illustrated, connect an audio signal generator (output impedance = 600 ohms) to LEFT LINE IN and a VTVM to LEFT LINE OUT. Then, set a standard tape cassette into the unit.
- Set the output of the audio signal generator at 400 Hz 200 mV. Record its signal and adjust INPUT VOLUME VR1 until the VTVM reading becomes 580 mV.



Figs. 24 & 25



- Reproduce the recorded signal and adjust CALIBRATION VOL. VR5 until the VTVM reading becomes 580 mV ±0.5dB.
- Set the MONITOR switch to TAPE.
- Record the signal from the audio signal generator again. Adjust the volume P105 until the needle of the left channel meter stands at the center of the Dolby zone mark.

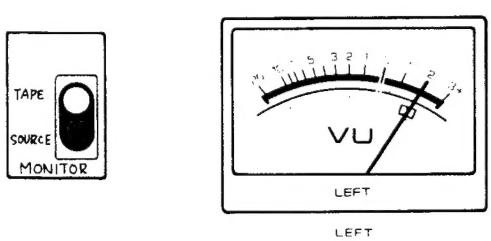


Fig. 26

- Make similar adjustment with the right channel with INPUT VOLUME VR2, CALIBRATION VOL. VR6 and the volume P205.

ADJUSTING DOLBY CALIBRATION OSC (APPROX. 400 Hz) GAIN

- Connect a VTVM to LEFT LINE OUT as shown.
- Set to ON the Dolby calibration switch.
- Set the unit in the recording mode and adjust the volume P306 until the VTVM needle stands at 580 mV ±0.5dB.
- Make similar adjustment with the right channel with the volume P307.

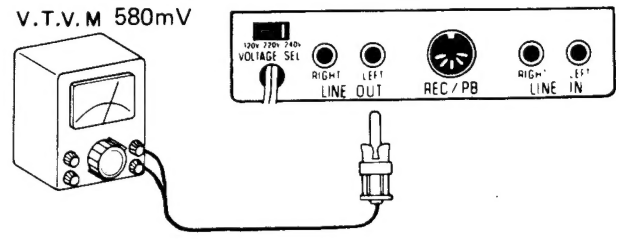


Fig. 27

ADJUSTING RECORDING/PLAYBACK FREQUENCY RESPONCE

1. NORMAL TAPE

- Set the TAPE SELECT switch to NORMAL and mount a normal tape cassette onto the unit.
- Connect an audio signal generator and an attenuator to LEFT LINE IN as illustrated.

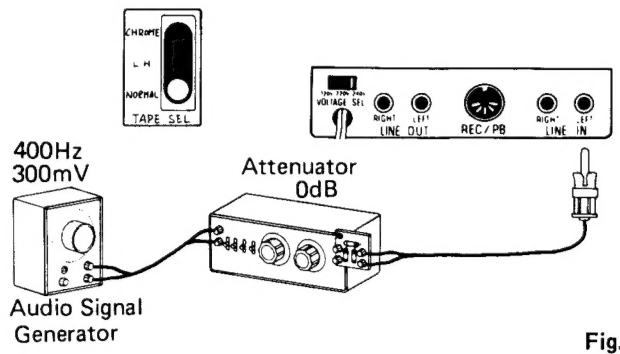


Fig. 28

- Set the audio signal generator output at 400 Hz 300 mV. With the unit in the recording mode, adjust INPUT VOLUME VR1 until the needle of the meter for the left channel comes to the center of the Dolby zone mark.

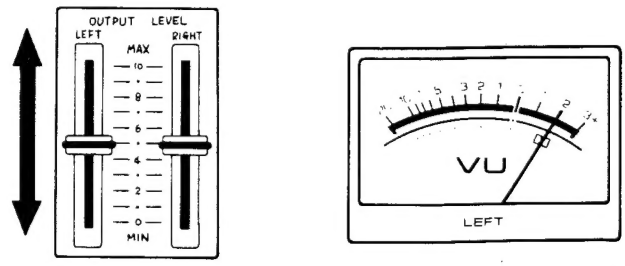


Fig. 29

- Set the MONITOR switch to TAPE and adjust CALIBRATION VOL. VR5 until the needle of the meter for the left channel points to the center of the Dolby zone mark.

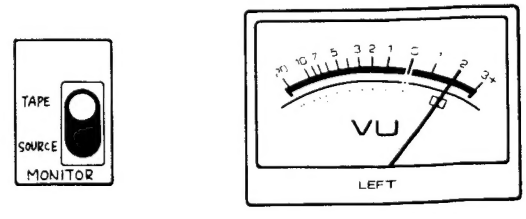


Fig. 30

ADJUSTMENT

- Set the attenuator at 20dB and connect a VTVM to LEFT LINE OUT.
- Record from the audio signal generator 1 kHz and 10 kHz signals alternately. Play back the signals.
- Adjust the volume P106 while watching the VTVM needle. The output difference between 10 kHz and 1 kHz signals recorded should be 0 ±1.5dB when they are played back.

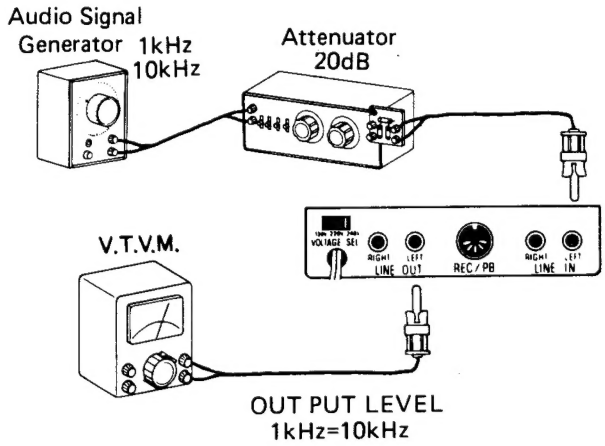


Fig. 31

- Make similar adjustment with the right channel with INPUT VOLUME VR2, CALIBRATION VOL. VR6 and the volume P206.

2. L.H. (LOW-NOISE HIGH-OUTPUT) TAPE

- The same procedure of adjustment applies to normal tape and L.H. tape, except for the following:
  - TAPE SELECT switch position – L.H.
  - Kind of tape used – Low-noise High-output tape (TDK-SD)
  - Frequency of input signal – 1.2 kHz and 12 kHz
  - Volumes to be adjusted – P107 (left channel), P207 (right channel)
  - Adjusted level – Output difference between 12 kHz and 1.2 kHz signals = 0 ±1.5dB.

3. CHROMIUM DIOXIDE TAPE

- The same procedure of adjustment applies to normal tape and chromium dioxide tape, except for the following:
  - TAPE SELECT switch position – CHROME
  - Kind of tape used – Chromium dioxide tape (BAFS TP-18)
  - Frequency of input signal – 1.4 kHz and 14 kHz
  - Volumes to be adjusted – P108 (left channel), P208 (right channel)
  - Adjusted level – Output difference between 14 kHz and 1.4 kHz signals = 0 ±1.5dB

ADJUSTING MONITOR HEAD AZIMUTH

- Connect an audio signal generator and an attenuator to LEFT LINE IN as illustrated. Then, mount a normal tape cassette onto the unit.
- Record 6 kHz signal from the audio signal generator and adjust the audio signal generator output until the needle of the meter for the left channel points to the center of the Dolby zone mark.

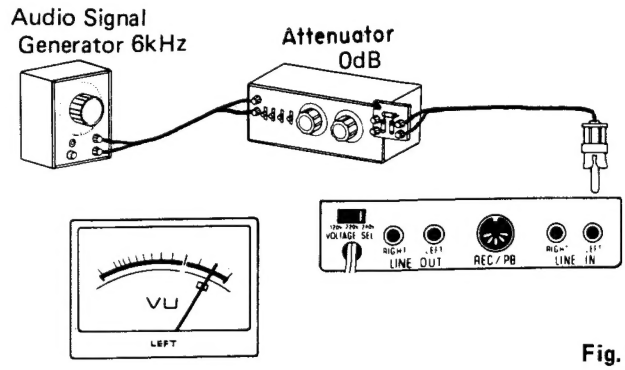


Fig. 32

- Set the attenuator at 20dB. Set the MONITOR switch t TAPE and connect a VTVM to LEFT LINE OUT.

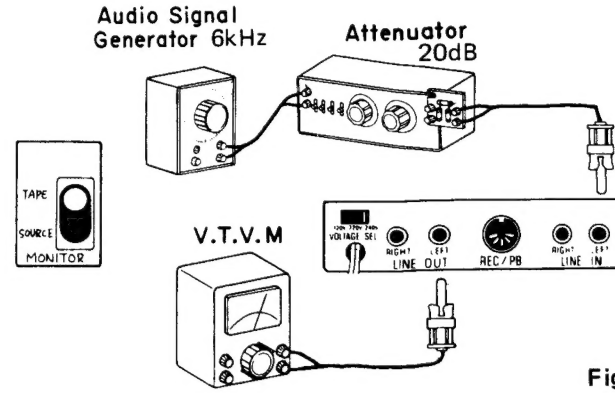
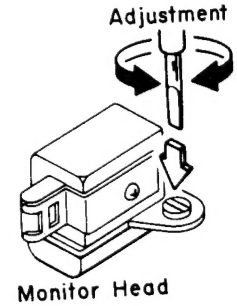
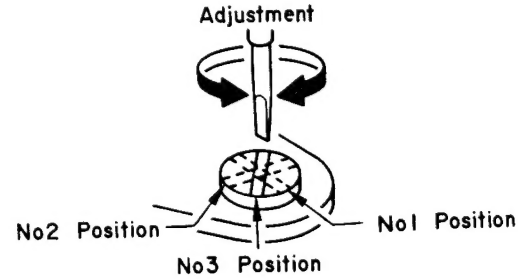


Fig. 3

- Set the monitor head azimuth adjusting screw to the No. position halfway between the Nos. 1 and 2 positions a instructed in the section on "Adjusting azimuth of R/ head".



Figs. 34 & 3



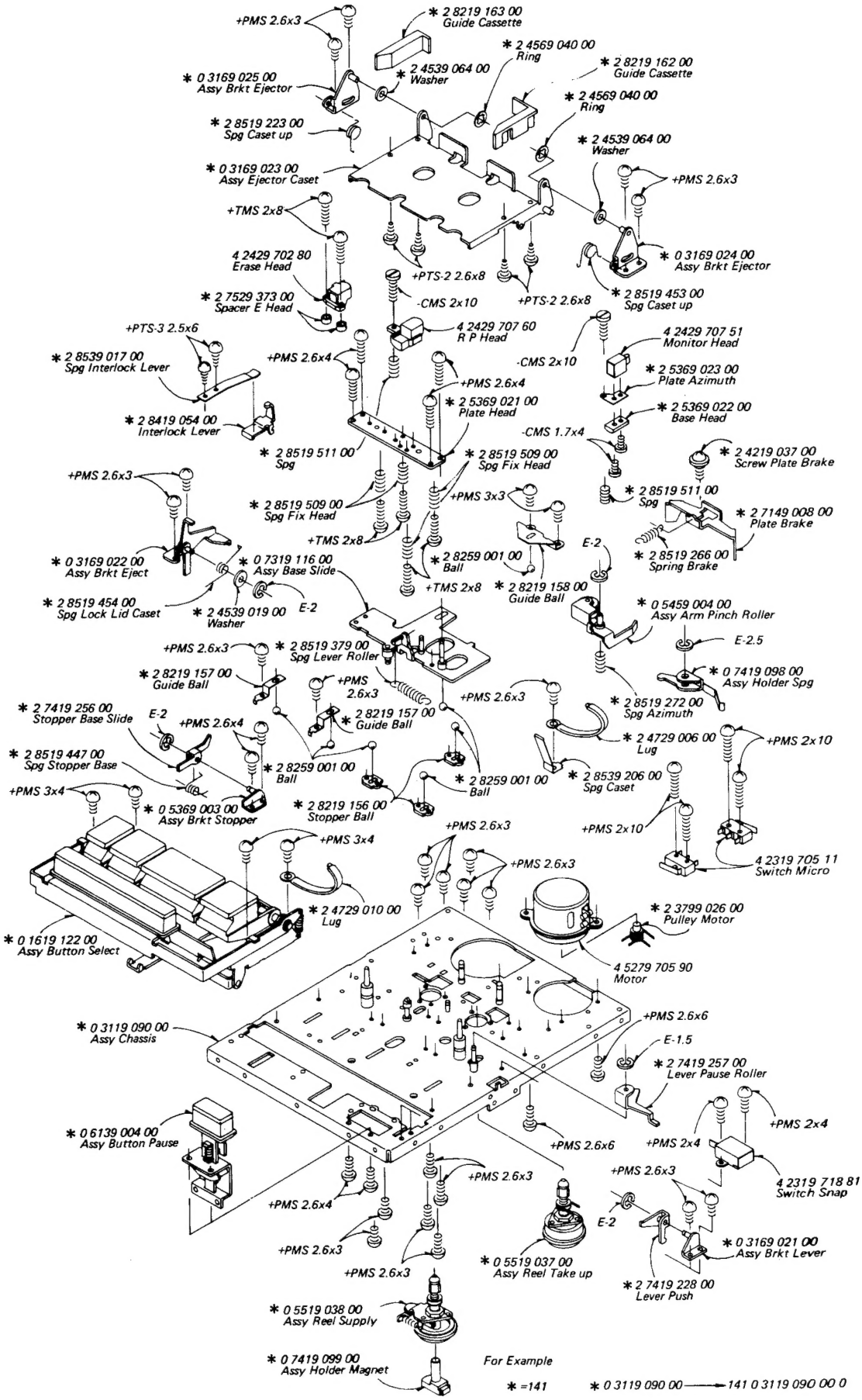
- After the completion of adjustment, fix the azimuth scre by applying screw lock.

PARTS LIST

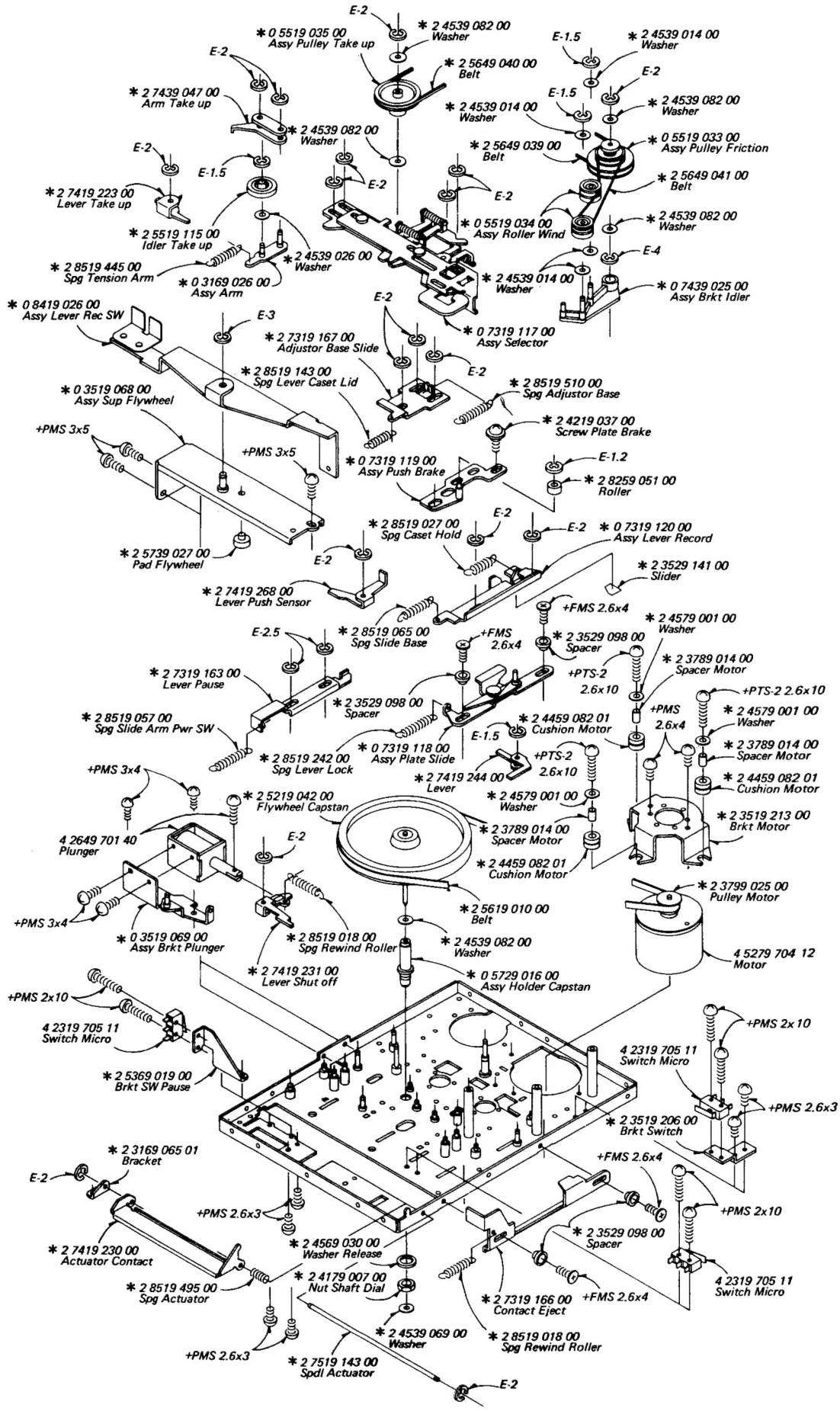
Key No.	Part No.	Description	Q'ty
MECHANISM			
	141 0 3119 09000	Chassis Assy	1
	141 0 3169 02100	Bracket Assy, Lever	1
	141 0 3169 02200	Bracket Assy, Eject	1
	141 0 3169 02300	Ejector Assy, Cassette	1
	141 0 3169 02400	Bracket Assy, Ejector	1
	141 0 3169 02500	Bracket Assy, Ejector	1
	141 0 3169 02600	Arm Assy	1
	141 0 3519 06800	Suppord Assy, Flyheel	1
	141 0 3519 06900	Bracket Assy, Plunger	1
	141 0 5369 00300	Bracket Assy, Stopper	1
	141 0 5459 00400	Arm Assy Pinch Roll	1
	141 0 5519 03300	Pulley Assy, Friction	1
	141 0 5519 03400	Roller Assy, Wind	2
	141 0 5519 03500	Pulley Assy, Take Up	1
	141 0 5519 03700	Reel Assy, Take Up	1
	141 0 5519 03800	Reel Assy, Supply	1
	141 0 5729 01600	Holder Assy, Capstan	1
	141 0 7319 11600	Base Assy, Slide	1
	141 0 7319 11700	Selector Assy	1
	141 0 7319 11800	Plate Assy, Slide	1
	141 0 7319 11900	Push Brake Assy	1
	141 0 7319 12000	Lever Assy, Record	1
	141 0 7419 09800	Holder Assy, Spring	1
	141 0 7419 09900	Holder Assy, Magnet	1
	141 0 7439 02500	Bracket Assy, Idler	1
	141 0 8419 02600	Lever Assy, Rec Switch	1
	141 2 3169 06501	Bracket	1
	141 2 3519 20600	Bracket, Switch	1
	141 2 3519 21300	Bracket, Motor	1
	141 2 3529 09800	Spacer	2
	141 2 3529 09800	Spacer	2
	141 2 3529 14100	Slider	1
	141 2 3789 01400	Spacer, Motor	3
	141 2 3799 02500	Pulley, Motor	1
	141 2 4179 00700	Nut Shaft Dial	1
	141 2 4219 03700	Screw, Plate Brake	1
	141 2 4219 03700	Screw, Plate Brake	1
	141 2 4459 08201	Cushion, Motor	3
	141 2 4539 01400	Washer	4
	141 2 4539 01900	Washer	1
	141 2 4539 02600	Washer	1
	141 2 4539 06400	Washer	2
	141 2 4539 06900	Washer	1
	141 2 4539 08200	Washer	2
	141 2 4539 08200	Washer	2
	141 2 4539 08200	Washer	1
	141 2 4569 03000	Washer, Release	1
	141 2 4569 04000	Ring	2
	141 2 4579 00100	Washer	3
	141 2 5219 04200	Flywheel Capstan	1
	141 2 5369 02100	Plate, Head	1
	141 2 5369 02200	Base, Head	1
	141 2 5369 02300	Plate, Azimuth	1
	141 2 5519 11500	Idler, Take up	1
	141 2 5739 02700	Pad, Flywheel	1
	141 2 7149 00800	Plate, Brake	1
	141 2 7319 16300	Lever, Pause	1
	141 2 7319 16600	Contact, Eject	1
	141 2 7319 16700	Adjustor, Base Slide	1
	141 2 7419 22300	Lever, Take Up	1
	141 2 7419 22800	Lever, Push	1
	141 2 7419 23000	Actuator, Contact	1
	141 2 7419 23100	Lever, Shut Off	1
	141 2 7419 24400	Lever	1
	141 2 7419 25600	Stopper, Base Slide	1
	141 2 7419 25700	Lever, Pause Roller	1
	141 2 7419 26800	Lever, Push Sensor	1
	141 2 7439 04700	Arm, Take Up	1
	141 2 7519 14300	Spindle Actuator	1
	141 2 7529 37300	Spacer, E Head	2
	141 2 8219 16200	Guide, Cassette	1
	141 2 8219 16300	Guide, Cassette	1
	141 2 8259 05100	Roller	1
	141 2 8519 01800	Spring, Rewind Roller	1
	141 2 8519 01800	Spring, Rewind Roller	1
	141 2 8519 02700	Spring, Cassette Hold	1
	141 2 8519 05700	Spring, Slide Arm Power Switch	1
	141 2 8519 06500	Spring Slide Base	1
	141 2 8519 14300	Spring, Lever Cassette Lid	1
	141 2 8519 22300	Spring, Cassette Up	1

Key No.	Part No.	Description	Q'ty
MECHANISM			
	141 2 8519 24200	Spring, Lever Lock.	1
	141 2 8519 26600	Spring Brake	1
	141 2 8519 27200	Spring, Azimuth	1
	141 2 8519 37900	Spring, Lever Roller	1
	141 2 8519 44500	Spring, Tension Arm	1
	141 2 8519 44700	Spring, Stopper Base	1
	141 2 8519 45300	Spring, Cassette Up	1
	141 2 8519 45400	Spring, Lock Lid Cassette	1
	141 2 8519 49500	Spring, Actuator	1
	141 2 8519 50900	Spring, Fix Head	2
	141 2 8519 50900	Spring, Fix Head	2
	141 2 8519 51000	Spring, Adjustor Base	1
	141 2 8519 51100	Spring	1
	141 2 8519 51100	Spring	1
	141 2 3519 20500	Bracket, Counter	1
	141 2 8119 01700	Counter	1
	141 0 1619 12200	Button Assy Select	1
	141 0 6139 00400	Button Assy Pause	1
	141 0 3129 00700	Sub Chassis Assy	1
	141 2 2419 14000	Cover Indicator	2
	141 2 3159 00700	Beam	1
	141 2 3169 06900	Bracket Back	1
	141 2 3169 07000	Bracket Front	1
	141 2 3169 07200	Bracket Side	1
	141 2 3169 07300	Bracket Side	1
	141 2 3229 18500	Shield Plate	1
	141 2 3659 06700	Bracket Switch	1
	141 2 3679 16500	Plate Jack	1
	141 2 3679 16600	Bracket Jack	1
	141 2 3719 02600	Bracket Trans	1
	141 2 3739 00500	Holder Indicator	3
	141 2 3749 04900	Bracket Lamp	1
	141 2 3799 02600	Pulley Motor	1
	141 2 3899 04500	Plate Cord Fix	1
	141 2 4619 05300	Tube	4
	141 2 4729 00600	Lug	1
	141 2 4729 01000	Lug	4
	141 2 5369 01900	Bracket Switch Pause	1
	141 2 5519 12200	Pulley Counter	1
	141 2 5619 01000	Belt	1
	141 2 5649 01800	Belt, Counter	1
	141 2 5649 02500	Belt, Counter	1
	141 2 5649 03900	Belt	1
	141 2 5649 04000	Belt	1
	141 2 5649 04100	Belt	1
	141 2 8219 15600	Stopper Ball	3
	141 2 8219 15700	Guide Ball	2
	141 2 8219 15800	Guide Ball	1
	141 2 8259 00100	Ball	1
	141 2 8259 00100	Ball	3
	141 2 8259 00100	Ball	2
	141 2 8419 05400	Interlock Lever	1
	141 2 8539 01700	Spring Interlock Lever	1
	141 2 8539 20600	Spring Cassette	1
	141 6 4549 03000	Label Fuse	1
	141 6 4549 03600	Label Fuse	1

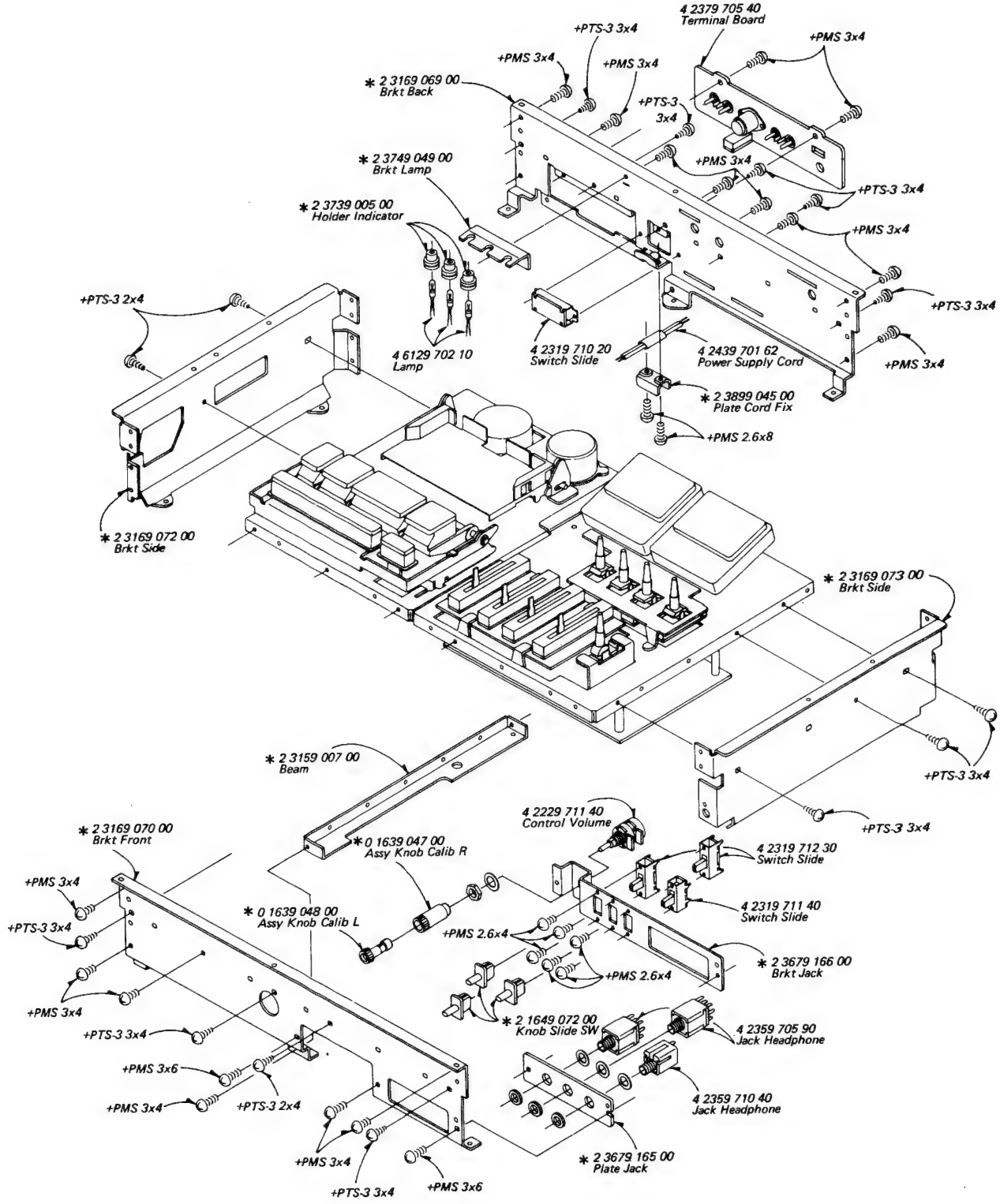
EXPLODED VIEW



EXPLODED VIEW



EXPLODED VIEW



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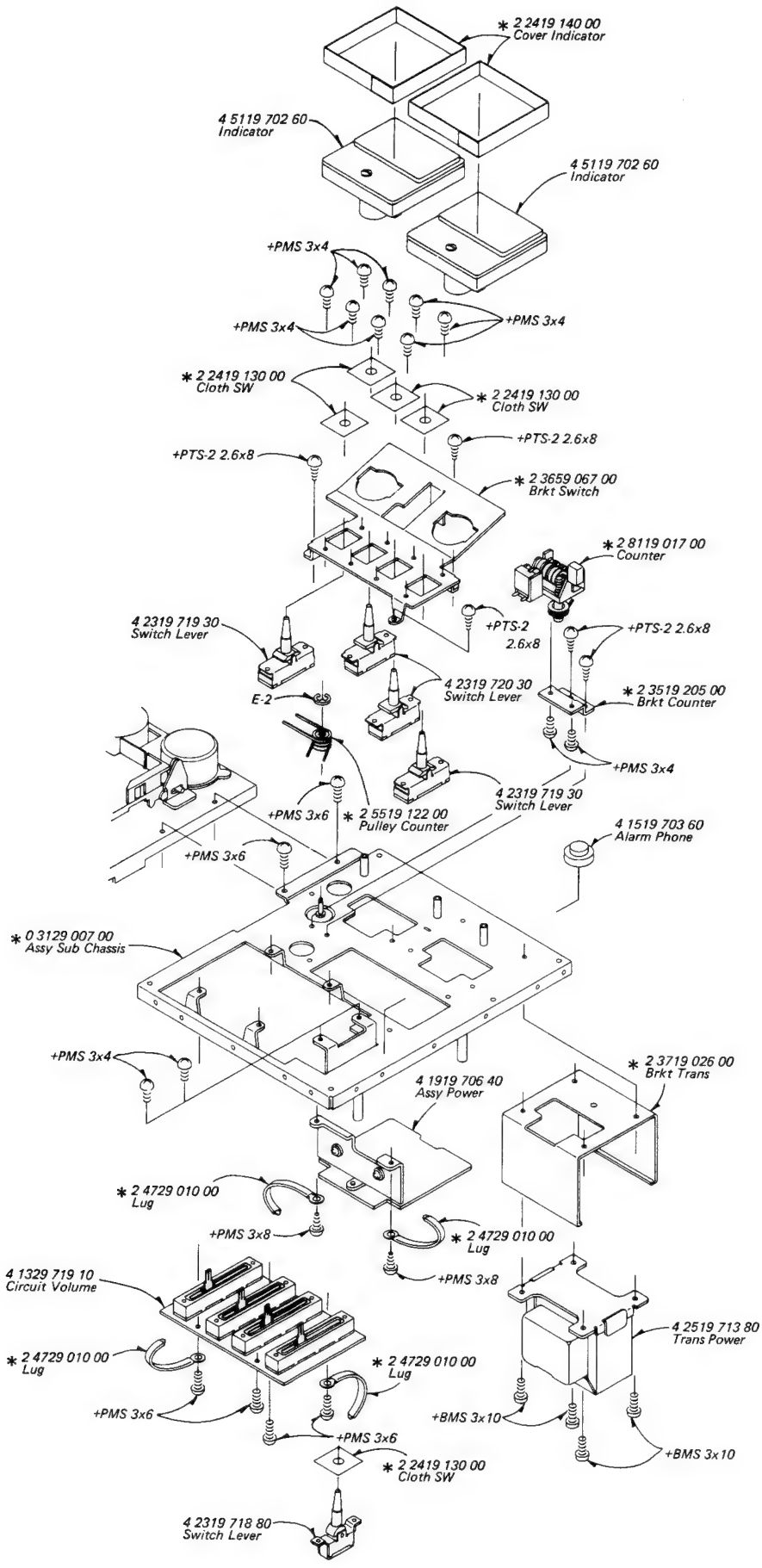


PARTS LIST

Key No.	Part No.	Description	Q'ty
ELECTRICAL PARTS			
VR05	4 2229 71140	Control Volume	1
C605	4 2239 70180	Capacitor	1
	4 2269 76760	PCB Mike	1
S301	4 2269 76770	PCB SW A	1
S303	4 2269 76780	PCB SW B	1
S306	4 2269 76880	PCB SW C	1
S110	4 2319 70511	Switch, Micro	1
S701	4 2319 70511	Switch, Micro	1
S401	4 2319 71020	Switch, Slide	1
S706	4 2319 71140	Switch, Slide	1
S303	4 2319 71230	Switch Slide	1
S402	4 2319 71880	Switch Lever	1
S301, 707	4 2319 71930	Switch Lever	2
S305	4 2319 72030	Switch Lever	1
	4 2359 70590	Jack Headphone	2
	4 2359 71040	Jack Headphone	1
	4 2359 71620	Connector Assy 13P	1
	4 2359 71630	Connector Assy 4P	1
	4 2359 71640	Connector Assy 3P	1
	4 2359 71650	Connector Assy 4P	1
	4 2359 71660	Connector Assy 10P	1
	4 2359 71670	Connector Assy	1
	4 2359 71680	Connector Assy 18P	1
	4 2359 71690	Connector Assy 18P	1
	4 2359 71830	Connector Assy 5P	1
	4 2359 71840	Connector Assy 5P	1
	4 2359 71850	Connector Assy	1
	4 2379 70110	Solderless Terminal	1
	4 2379 70280	Lug 3P	1
	4 2379 70410	Lug 4P	1
	4 2379 70540	Terminal Board	1
	4 2429 70280	Eraser Head	1
	4 2429 70751	Monitor Head	1
	4 2429 70760	R/P Head	1
	4 2439 70162	Power Supply Cord	1
	4 2519 71380	Trans Power	1
	4 2649 70140	Plunger	1
	4 5119 70260	Indicator	2
	4 5279 70412	Motor	1
	4 5279 70590	Motor	1
	4 6129 70210	Lamp	3
R115	RD1 0 3251 KH000	Carbon 10K ohm ±10% 1/4W	1
R215	RD1 0 3251 KH000	Carbon 10K ohm ±10% 1/4W	1
R121	RD2 2 2251 KV000	Carbon 2.2K ohm ±10% 1/4W	1
R221	RD2 2 2251 KV000	Carbon 2.2K ohm ±10% 1/4W	1
R102	RD8 2 3251 KV000	Carbon 82K ohm ±10% 1/4W	1
R202	RD8 2 3251 KV000	Carbon 82K ohm ±10% 1/4W	1
R315	RH2 7 1103 KH000	Metal oxide 270 ohm ±10% 10W	1
R317	RH3 9 1103 KH000	Metal oxide 390 ohm ±10% 10W	1
R316	RH4 7 1103 KH000	Metal oxide 470 ohm ±10% 10W	1
CONTROL PCB ASSY			
	4 1329 71820	Control, PCB Assy	1
AL01	4 1519 70360	Alarm Phone	1
D403	4 2029 70160	Diode 1S953	1
D406	4 2029 70160	Diode 1S953	1
D404	4 2029 70160	Diode 1S953	1
D407	4 2029 70160	Diode 1S953	1
D408	4 2029 70160	Diode 1S953	1
D410	4 2029 70160	Diode 1S953	1
D409	4 2029 70160	Diode 1S953	1
D401	4 2029 70160	Diode 1S953	1
D402	4 2029 70160	Diode 1S953	1
P401	4 2229 72650	Potentiometer	1
RE01	4 2319 71370	Switch	1
	4 2369 71070	Connector 13P	1
C420	CC1 0 2500 KE00C	Ceramic 0.001mF ±10% 50V	1
C403	CD1 0 5250 0000V	Electrolytic 1mF 25V	1
C419	CD1 0 5250 0000V	Electrolytic 1mF 25V	1
C413	CD1 0 5250 0000V	Electrolytic 1mF 25V	1
C421	CD1 0 5250 0000V	Electrolytic 1mF 25V	1
C401	CD1 0 6250 0000V	Electrolytic 10mF 25V	1
C418	CD1 0 663A 0000V	Electrolytic 10mF 6.3V	1
C404	CD1 0 7250 0000V	Electrolytic 100mF 25V	1
C408	CD1 0 7250 0000V	Electrolytic 100mF 25V	1
C402	CD1 0 763A 0000V	Electrolytic 100mF 6.3V	1
C405	CD1 0 8250 0000V	Electrolytic 1000mF 25V	1

Key No.	Part No.	Description	Q'ty
CONTROL PCB ASSY			
C406	CD1 0 8250 0000V	Electrolytic 1000mF 25V	1
C411	CD4 7 6160 0000V	Electrolytic 47mF 16V	1
C407	CD4 7 7250 0000V	Electrolytic 470mF 25V	1
C410	CD4 7 731A 0000V	Electrolytic 470mF 31V	1
C414	CM1 0 3500 K00SV	Mylar 0.01mF ±10% 50V	1
C414	CM1 0 3500 K00NV	Mylar 0.01mF ±10% 50V	1
C415	CM1 0 3500 K00SV	Mylar 0.01mF ±10% 50V	1
C415	CM1 0 3500 K00NV	Mylar 0.01mF ±10% 50V	1
C416	CM1 0 3500 K00SV	Mylar 0.01mF ±10% 50V	1
C416	CM1 0 3500 K00NV	Mylar 0.01mF ±10% 50V	1
C417	CM1 0 3500 K00SV	Mylar 0.01mF ±10% 50V	1
C417	CM1 0 3500 K00NV	Mylar 0.01mF ±10% 50V	1
C409	CT4 7 663A K00DV	Tantal 47mF ±10% 6.3V	1
R405	RD1 0 1251 JV000	Carbon 100 ohm ±5% 1/4W	1
R414	RD1 0 2251 JV000	Carbon 1K ohm ±5% 1/4W	1
R420	RD1 0 2251 JV000	Carbon 1K ohm ±5% 1/4W	1
R404	RD1 0 3251 JV000	Carbon 10K ohm ±5% 1/4W	1
R425	RD1 0 3251 JV000	Carbon 10K ohm ±5% 1/4W	1
R439	RD1 0 4251 JV000	Carbon 100K ohm ±5% 1/4W	1
R418	RD1 2 1251 JV000	Carbon 120 ohm ±5% 1/4W	1
R408	RD1 2 2251 JV000	Carbon 1.2K ohm ±5% 1/4W	1
R410	RD1 2 2251 JV000	Carbon 1.2K ohm ±5% 1/4W	1
R423	RD1 2 3251 JV000	Carbon 12K ohm ±5% 1/4W	1
R416	RD1 2 4251 JV000	Carbon 120K ohm ±5% 1/4W	1
R419	RD1 2 4251 JV000	Carbon 120K ohm ±5% 1/4W	1
R417	RD1 5 2251 JV000	Carbon 1.5K ohm ±5% 1/4W	1
R426	RD1 5 2251 JV000	Carbon 1.5K ohm ±5% 1/4W	1
R406	RD1 5 4251 JV000	Carbon 150K ohm ±5% 1/4W	1
R421	RD1 8 4251 JV000	Carbon 180K ohm ±5% 1/4W	1
R401	RD2 2 0251 JV000	Carbon 22 ohm ±5% 1/4W	1
R427	RD2 2 0251 JV000	Carbon 22 ohm ±5% 1/4W	1
R407	RD2 2 2251 JV000	Carbon 2.2K ohm ±5% 1/4W	1
R422	RD2 2 3251 JV000	Carbon 22K ohm ±5% 1/4W	1
R437	RD2 2 3251 JV000	Carbon 22K ohm ±5% 1/4W	1
R411	RD2 7 1251 JV000	Carbon 270 ohm ±5% 1/4W	1
R436	RD2 7 1251 JV000	Carbon 270 ohm ±5% 1/4W	1
R430	RD2 7 2251 JV000	Carbon 2.7K ohm ±5% 1/4W	1
R402	RD2 7 3251 JV000	Carbon 27K ohm ±5% 1/4W	1
R403	RD2 7 3251 JV000	Carbon 27K ohm ±5% 1/4W	1
R415	RD2 7 4251 JV000	Carbon 270K ohm ±5% 1/4W	1
R432	RD2 7 4251 JV000	Carbon 270K ohm ±5% 1/4W	1
R412	RD3 3 2251 JV000	Carbon 3.3K ohm ±5% 1/4W	1
R424	RD3 3 2251 JV000	Carbon 3.3K ohm ±5% 1/4W	1
R434	RD4 7 1251 JV000	Carbon 470 ohm ±5% 1/4W	1
R438	RD4 7 3251 JV000	Carbon 47K ohm ±5% 1/4W	1
R409	RD5 6 3251 JV000	Carbon 56K ohm ±5% 1/4W	1
R433	RD5 6 3251 JV000	Carbon 56K ohm ±5% 1/4W	1
R429	RD6 8 2251 JV000	Carbon 6.8K ohm ±5% 1/4W	1
R431	RD6 8 2251 JV000	Carbon 6.8K ohm ±5% 1/4W	1
R428	RD6 8 2251 JV000	Carbon 6.8K ohm ±5% 1/4W	1
R435	RD8 2 1251 JV000	Carbon 820 ohm ±5% 1/4W	1
R413	RH1 0 1102 KH000	Metal oxide 100K ohm ±10% 1W	1
D405	202 5 9410 01010	Diode 10D-1	1
D411	202 5 9410 01010	Diode 10D-1	1
Q408	203 5 0200 18740	Transistor 2SB187	1
Q409	203 5 0800 18740	Transistor 2SD187	1
Q401	203 5 5100 53660	Transistor 2SC 536	1
Q402	203 5 5100 53660	Transistor 2SC 536	1
Q405	203 5 5100 53670	Transistor 2SC 536	1
Q406	203 5 5100 53670	Transistor 2SC 536	1
Q404	203 5 6430 51140	Transistor 2SB 511	1
Q403	203 5 6800 65960	Transistor 2SA659	1
Q407	203 5 6800 65960	Transistor 2SA659F	1
	4 1519 70360	Alam Phone	1
POWER PCB ASSY			
	4 1919 70640	Power PCB Assy	1
D602	4 2029 70160	Diode 1S953	1
D601	4 2029 70160	Diode 1S953	1
D604	4 2029 70290	Diode WZ-120	1
D603	4 2029 70360	Diode WZ-210	1
D601	4 2039 70093	Transistor 2SD227	1
F602	4 2349 70140	Fuse	1
F601	4 2349 70140	Fuse	1
H601	4 2359 70910	Holder Fuse	2
H602	4 2359 70910	Holder Fuse	2
C601	CD1 0 7250 0000V	Electrolytic 100mF 25V	1
C604	CD1 0 8250 0000V	Electrolytic 1000mF 25V	1

PARTS LIST

Key No.	Part No.	Description	Q'ty
POWER PCB ASSY			
C602	CD1 0 8350 0000V	Electrolytic 1000mF 35V	1
C603	CD4 7 7160 0000V	Electrolytic 470mF 16V	1
R601	RD5 6 2251 KH000	Carbon 5.6K ohm ±10% 1/4W	1
R602	RH2 7 1102 KH000	Metal oxide 270 ohm ±10% 1W	1
D605	202 5 2300 01710	Diode DS 17	1
D607	202 5 2300 01710	Diode DS 17	1
D608	202 5 2300 01810	Diode DS 18	1
D606	202 5 2300 01810	Diode DS 18	1
Q602	203 5 6440 50750	Transistor 2SB507	1
Q603	203 5 8310 31360	Transistor 2SD313	1
AUDIO AMP PCB ASSY			
	4 1329 71620	Dolby Unit	2
	4 1329 71890	Audio Amp PCB Assy	1
Q301	4 2039 70100	Transistor 2SC945	1
P102	4 2229 72360	Potentiometer	1
P205	4 2229 72360	Potentiometer	1
P301	4 2229 72360	Potentiometer	1
P302	4 2229 72360	Potentiometer	1
P103	4 2229 72360	Potentiometer	1
P201	4 2229 72360	Potentiometer	1
P202	4 2229 72360	Potentiometer	1
P203	4 2229 72360	Potentiometer	1
P104	4 2229 72360	Potentiometer	1
P101	4 2229 72360	Potentiometer	1
P105	4 2229 72360	Potentiometer	1
P204	4 2229 72360	Potentiometer	1
S100	4 2319 71960	Switch Slide	1
S200	4 2319 71960	Switch Slide	1
	4 2359 71600	Connector 6P	1
	4 2359 71600	Connector 6P	1
T101	4 2549 70150	Matching Trans.	1
T201	4 2549 70150	Matching Trans.	1
L104	4 2729 70090	Coil	1
L201	4 2729 70090	Coil	1
L204	4 2729 70090	Coil	1
L101	4 2729 70090	Coil	1
C326	CA1 0 5100 M000V	Alcicon 1mF ±20% 10V	1
C171	CA4 7 4100 M000V	Alcicon 0.47mF ±20% 10V	1
C271	CA4 7 4100 M000V	Alcicon 0.47mF ±20% 10V	1
C203	CC1 0 1500 KD00C	Ceramic 100pF ±10% 50V	1
C158	CC1 0 1500 KD00C	Ceramic 100pF ±10% 50V	1
C103	CC1 0 1500 KD00C	Ceramic 100pF ±10% 50V	1
C258	CC1 0 1500 KD00C	Ceramic 100pF ±10% 50V	1
C156	CC1 2 2500 KE00C	Ceramic 0.0012mF ±10% 50V	1
C256	CC1 2 2500 KE00C	Ceramic 0.0012mF ±10% 50V	1
C210	CC2 2 1500 KD00C	Ceramic 220pF ±10% 50V	1
C165	CC2 2 1500 KD00C	Ceramic 220pF ±10% 50V	1
C110	CC2 2 1500 KD00C	Ceramic 220pF ±10% 50V	1
C265	CC2 2 1500 KD00C	Ceramic 220pF ±10% 50V	1
C166	CC2 2 2500 KE00C	Ceramic 0.0022mF ±10% 50V	1
C266	CC2 2 2500 KE00C	Ceramic 0.0022mF ±10% 50V	1
C117	CC3 3 1500 KD00C	Ceramic 330pF ±10% 50V	1
C217	CC3 3 1500 KD00C	Ceramic 330pF ±10% 50V	1
C211	CC3 3 1500 KE00C	Ceramic 330pF ±10% 50V	1
C111	CC3 3 1500 KE00C	Ceramic 330pF ±10% 50V	1
C160	CC6 8 0500 KD00C	Ceramic 68pF ±10% 50V	1
C105	CC6 8 0500 KD00C	Ceramic 68pF ±10% 50V	1
C260	CC6 8 0500 KD00C	Ceramic 68pF ±10% 50V	1
C205	CC6 8 0500 KD00C	Ceramic 68pF ±10% 50V	1
C277	CD1 0 5100 0000V	Electrolytic 1mF 10V	1
C177	CD1 0 5100 0000V	Electrolytic 1mF 10V	1
C116	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C112	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C151	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C152	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C154	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C118	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C113	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C107	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C108	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C273	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C274	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C269	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C306	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C272	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C275	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C252	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C254	CD1 0 6160 0000V	Electrolytic 10mF 16V	1

Key No.	Part No.	Description	Q'ty
AUDIO AMP PCB ASSY			
C212	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C216	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C262	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C263	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C218	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C251	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C213	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C267	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C172	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C167	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C162	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C173	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C163	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C174	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C169	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C175	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C207	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C208	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C115	CD1 0 7160 0000V	Electrolytic 100mF 16V	1
C215	CD1 0 7160 0000V	Electrolytic 100mF 16V	1
C276	CD2 2 763A 0000V	Electrolytic 220mF 6.3V	1
C176	CD2 2 763A 0000V	Electrolytic 220mF 6.3V	1
C291	CD4 7 6160 0000V	Electrolytic 47mF 16V	1
C301	CD4 7 6160 0000V	Electrolytic 47mF 16V	1
C155	CD4 7 6160 0000V	Electrolytic 47mF 16V	1
C104	CD4 7 6160 0000V	Electrolytic 47mF 16V	1
C114	CD4 7 6160 0000V	Electrolytic 47mF 16V	1
C101	CD4 7 6160 0000V	Electrolytic 47mF 16V	1
C159	CD4 7 6160 0000V	Electrolytic 47mF 16V	1
C214	CD4 7 6160 0000V	Electrolytic 47mF 16V	1
C259	CD4 7 6160 0000V	Electrolytic 47mF 16V	1
C255	CD4 7 6160 0000V	Electrolytic 47mF 16V	1
C201	CD4 7 6160 0000V	Electrolytic 47mF 16V	1
C204	CD4 7 6160 0000V	Electrolytic 47mF 16V	1
C191	CD4 7 6160 0000V	Electrolytic 47mF 16V	1
C287	CD4 7 6250 0000V	Electrblytic 47mF 25V	1
C288	CD4 7 6250 0000V	Electrolytic 47mF 25V	1
C270	CD4 7 6250 0000V	Electrolytic 47mF 25V	1
C187	CD4 7 6250 0000V	Electrolytic 47mF 25V	1
C188	CD4 7 6250 0000V	Electrolytic 47mF 25V	1
C170	CD4 7 6250 0000V	Electrolytic 47mF 25V	1
C302	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C290	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C119	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C161	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C219	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C261	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C190	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C206	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C268	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C106	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C168	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C304	CM1 5 3500 K00SV	Mylar 0.015mF ±10% 50V	1
C305	CM1 5 3500 K00SV	Mylar 0.015mF ±10% 50V	1
C303	CM1 5 3500 K00SV	Mylar 0.015mF ±10% 50V	1
C193	CM3 3 2500 K00SV	Mylar 0.0033mF ±10% 50V	1
C293	CM3 3 2500 K00SV	Mylar 0.0033mF ±10% 50V	1
C264	CM3 9 3500 K00SV	Mylar 0.039mF ±10% 50V	1
C164	CM3 9 3500 K00SV	Mylar 0.039mF ±10% 50V	1
C209	CM5 6 3500 K00SV	Mylar 0.056mF ±10% 50V	1
C109	CM5 6 3500 K00SV	Mylar 0.056mF ±10% 50V	1
C202	CT1 0 6160 W00DV	Tantal 10mF +50 −20% 16V	1
C257	CT1 0 6160 W00DV	Tantal 10mF +50 −20% 16V	1
C102	CT1 0 6160 W00DV	Tantal 10mF +50 −20% 16V	1
C157	CT1 0 6160 W00DV	Tantal 10mF +50 −20% 16V	1
R261	RD1 0 1251 KV000	Carbon 100 ohm ±10% 1/4W	1
R161	RD1 0 1251 KV000	Carbon 100 ohm ±10% 1/4W	1
R183	RD1 0 2251 KV000	Carbon 1K ohm ±10% 1/4W	1
R283	RD1 0 2251 KV000	Carbon 1K ohm ±10% 1/4W	1
R310	RD1 0 3251 KV000	Carbon 10K ohm ±10% 1/4W	1
R311	RD1 0 3251 KV000	Carbon 10K ohm ±10% 1/4W	1
R218	RD1 0 3251 KV000	Carbon 10K ohm ±10% 1/4W	1
R260	RD1 0 3251 KV000	Carbon 10K ohm ±10% 1/4W	1
R303	RD1 0 3251 KV000	Carbon 10K ohm ±10% 1/4W	1
R103	RD1 0 3251 KV000	Carbon 10K ohm ±10% 1/4W	1
R124	RD1 0 3251 KV000	Carbon 10K ohm ±10% 1/4W	1
R118	RD1 0 3251 KV000	Carbon 10K ohm ±10% 1/4W	1
R160	RD1 0 3251 KV000	Carbon 10K ohm ±10% 1/4W	1
R224	RD1 0 3251 KV000	Carbon 10K ohm ±10% 1/4W	1
R203	RD1 0 3251 KV000	Carbon 10K ohm ±10% 1/4W	1

PARTS LIST

Key No.	Part No.	Description	Q'ty
AUDIO AMP PCB ASSY			
R105	RD1 0 4251 KV000	Carbon 100K ohm ±10% 1/4W	1
R158	RD1 0 4251 KV000	Carbon 100K ohm ±10% 1/4W	1
R528	RD1 0 4251 KV000	Carbon 100K ohm ±10% 1/4W	1
R205	RD1 0 4251 KV000	Carbon 100K ohm ±10% 1/4W	1
R108	RD1 2 1251 KV000	Carbon 120 ohm ±10% 1/4W	1
R208	RD1 2 1251 KV000	Carbon 120 ohm ±10% 1/4W	1
R277	RD1 2 3251 KV000	Carbon 12K ohm ±10% 1/4W	1
R169	RD1 2 3251 KV000	Carbon 12K ohm ±10% 1/4W	1
R269	RD1 2 3251 KV000	Carbon 12K ohm ±10% 1/4W	1
R177	RD1 2 3251 KV000	Carbon 12K ohm ±10% 1/4W	1
R276	RD1 2 4251 KV000	Carbon 120K ohm ±10% 1/4W	1
R168	RD1 2 4251 KV000	Carbon 120K ohm ±10% 1/4W	1
R268	RD1 2 4251 KV000	Carbon 120K ohm ±10% 1/4W	1
R176	RD1 2 4251 KV000	Carbon 120K ohm ±10% 1/4W	1
R125	RD1 5 2251 KV000	Carbon 1.5K ohm ±10% 1/4W	1
R225	RD1 5 2251 KV000	Carbon 1.5K ohm ±10% 1/4W	1
R298	RD1 5 4251 KV000	Carbon 150K ohm ±10% 1/4W	1
R198	RD1 5 4251 KV000	Carbon 150K ohm ±10% 1/4W	1
R295	RD2 2 1251 KV000	Carbon 220 ohm ±10% 1/4W	1
R195	RD2 2 1251 KV000	Carbon 220 ohm ±10% 1/4W	1
R116	RD2 2 4251 KV000	Carbon 220K ohm ±10% 1/4W	1
R301	RD2 2 4251 KV000	Carbon 220K ohm ±10% 1/4W	1
R216	RD2 2 4251 KV000	Carbon 220K ohm ±10% 1/4W	1
R279	RD2 7 1251 KV000	Carbon 270 ohm ±10% 1/4W	1
R179	RD2 7 1251 KV000	Carbon 270 ohm ±10% 1/4W	1
R178	RD2 7 2251 KV000	Carbon 2.7K ohm ±10% 1/4W	1
R270	RD2 7 2251 KV000	Carbon 2.7K ohm ±10% 1/4W	1
R170	RD2 7 2251 KV000	Carbon 2.7K ohm ±10% 1/4W	1
R278	RD2 7 2251 KV000	Carbon 2.7K ohm ±10% 1/4W	1
R251	RD3 3 1251 KV000	Carbon 330 ohm ±10% 1/4W	1
R271	RD3 3 1251 KV000	Carbon 330 ohm ±10% 1/4W	1
R256	RD3 3 1251 KV000	Carbon 330 ohm ±10% 1/4W	1
R156	RD3 3 1251 KV000	Carbon 330 ohm ±10% 1/4W	1
R171	RD3 3 1251 KV000	Carbon 330 ohm ±10% 1/4W	1
R151	RD3 3 1251 KV000	Carbon 330 ohm ±10% 1/4W	1
R179	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R184	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R182	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R219	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R274	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R255	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R257	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R282	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R297	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R284	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R304	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R119	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R174	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R155	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R210	RD3 3 3251 KV000	Carbon 33K ohm ±10% 1/4W	1
R263	RD3 3 3251 KV000	Carbon 33K ohm ±10% 1/4W	1
R110	RD3 3 3251 KV000	Carbon 33K ohm ±10% 1/4W	1
R157	RD3 3 3251 KV000	Carbon 33K ohm ±10% 1/4W	1
R163	RD3 3 3251 KV000	Carbon 33K ohm ±10% 1/4W	1
R220	RD3 9 2251 KV000	Carbon 3.9K ohm ±10% 1/4W	1
R212	RD3 9 2251 KV000	Carbon 3.9K ohm ±10% 1/4W	1
R308	RD3 9 2251 KV000	Carbon 3.9K ohm ±10% 1/4W	1
R120	RD3 9 2251 KV000	Carbon 3.9K ohm ±10% 1/4W	1
R112	RD3 9 2251 KV000	Carbon 3.9K ohm ±10% 1/4W	1
R165	RD3 9 2251 KV000	Carbon 3.9K ohm ±10% 1/4W	1
R265	RD3 9 2251 KV000	Carbon 3.9K ohm ±10% 1/4W	1
R114	RD4 7 1251 KV000	Carbon 470 ohm ±10% 1/4W	1
R214	RD4 7 1251 KV000	Carbon 470 ohm ±10% 1/4W	1
R175	RD4 7 2251 KV000	Carbon 4.7K ohm ±10% 1/4W	1
R275	RD4 7 2251 KV000	Carbon 4.7K ohm ±10% 1/4W	1
R107	RD4 7 3251 KV000	Carbon 47K ohm ±10% 1/4W	1
R109	RD4 7 3251 KV000	Carbon 47K ohm ±10% 1/4W	1
R162	RD4 7 3251 KV000	Carbon 47K ohm ±10% 1/4W	1
R207	RD4 7 3251 KV000	Carbon 47K ohm ±10% 1/4W	1
R209	RD4 7 3251 KV000	Carbon 47K ohm ±10% 1/4W	1
R262	RD4 7 3251 KV000	Carbon 47K ohm ±10% 1/4W	1
R305	RD5 6 0251 KV000	Carbon 56 ohm ±10% 1/4W	1
R123	RD5 6 1251 KV000	Carbon 560 ohm ±10% 1/4W	1
R223	RD5 6 1251 KV000	Carbon 560 ohm ±10% 1/4W	1
R167	RD5 6 2251 KV000	Carbon 5.6K ohm ±10% 1/4W	1
R627	RD5 6 2251 KV000	Carbon 5.6K ohm ±10% 1/4W	1
R309	RD5 6 3251 KV000	Carbon 56K ohm ±10% 1/4W	1
R302	RD5 6 3251 KV000	Carbon 56K ohm ±10% 1/4W	1
R117	RD5 6 3251 KV000	Carbon 56K ohm ±10% 1/4W	1
R166	RD5 6 3251 KV000	Carbon 56K ohm ±10% 1/4W	1

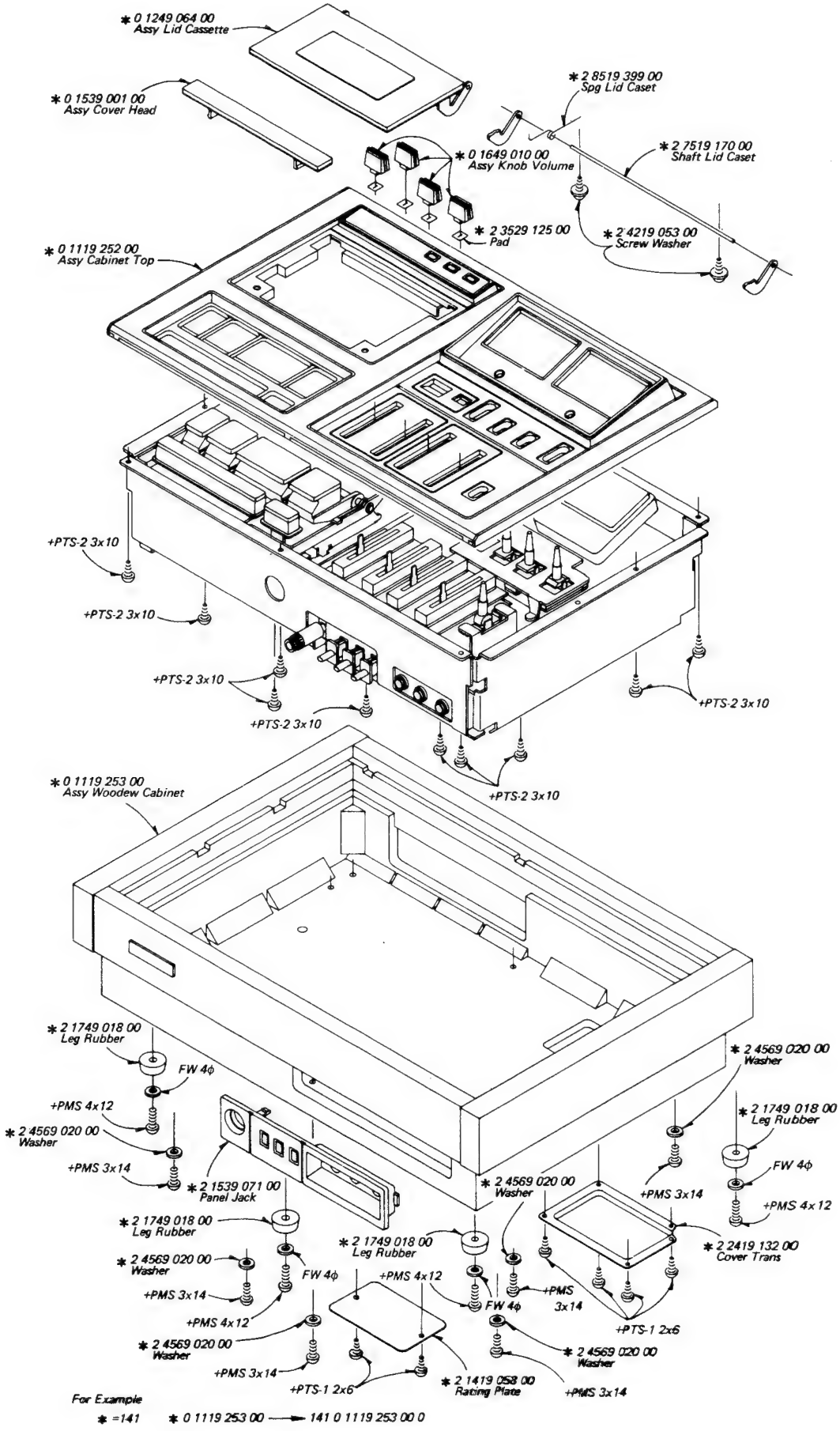
Key No.	Part No.	Description	Q'ty
AUDIO AMP PCB ASSY			
R217	RD5 6 3251 KV000	Carbon 56K ohm ±10% 1/4W	1
R266	RD5 6 3251 KV000	Carbon 56K ohm ±10% 1/4W	1
R216	RD6 8 2251 KV000	Carbon 6.8K ohm ±10% 1/4W	1
R306	RD6 8 2251 KV000	Carbon 6.8K ohm ±10% 1/4W	1
R307	RD6 8 2251 KV000	Carbon 6.8K ohm ±10% 1/4W	1
R113	RD6 8 2251 KV000	Carbon 6.8K ohm ±10% 1/4W	1
R253	RD6 8 3251 KV000	Carbon 68K ohm ±10% 1/4W	1
R280	RD6 8 3251 KV000	Carbon 68K ohm ±10% 1/4W	1
R180	RD6 8 3251 KV000	Carbon 68K ohm ±10% 1/4W	1
R153	RD6 8 3251 KV000	Carbon 68K ohm ±10% 1/4W	1
R206	RD6 8 4251 KV000	Carbon 680K ohm ±10% 1/4W	1
R259	RD6 8 4251 KV000	Carbon 680K ohm ±10% 1/4W	1
R106	RD6 8 4251 KV000	Carbon 680K ohm ±10% 1/4W	1
R159	RD6 8 4251 KV000	Carbon 680K ohm ±10% 1/4W	1
R273	RD8 2 1251 KV000	Carbon 820 ohm ±10% 1/4W	1
R173	RD8 2 1251 KV000	Carbon 820 ohm ±10% 1/4W	1
R211	RD8 2 2251 KV000	Carbon 8.2K ohm ±10% 1/4W	1
R264	RD8 2 2251 KV000	Carbon 8.2K ohm ±10% 1/4W	1
R164	RD8 2 2251 KV000	Carbon 8.2K ohm ±10% 1/4W	1
R111	RD8 2 2251 KV000	Carbon 8.2K ohm ±10% 1/4W	1
R254	RD8 2 3251 KV000	Carbon 82K ohm ±10% 1/4W	1
R222	RD8 2 3251 KV000	Carbon 82K ohm ±10% 1/4W	1
R281	RD8 2 3251 KV000	Carbon 82K ohm ±10% 1/4W	1
R181	RD8 2 3251 KV000	Carbon 82K ohm ±10% 1/4W	1
R122	RD8 2 3251 KV000	Carbon 82K ohm ±10% 1/4W	1
R154	RD8 2 3251 KV000	Carbon 82K ohm ±10% 1/4W	1
D204	202 5 9110 18810	Diode 1S 188-AM	1
D103	202 5 9110 18810	Diode 1S 188-AM	1
D104	202 5 9110 18810	Diode 1S 188-AM	1
D203	202 5 9110 18810	Diode 1S 188-AM	1
Q103	203 5 5100 69351	Transistor 2SC 693 or	1
Q103	4 2039 70310	Transistor 2SC 1648	1
Q203	203 5 5100 69351	Transistor 2SC 693 or	1
Q203	4 2039 70310	Transistor 2SC 1648	1
Q105	203 5 5100 69351	Transistor 2SC 693 or	1
Q105	4 2039 70310	Transistor 2SC 1648R	1
Q205	203 5 5100 69351	Transistor 2SC 693 or	1
Q205	4 2039 70310	Transistor 2SC 1648R	1
Q108	203 5 5100 69351	Transistor 2SC 693 or	1
Q108	4 2039 70310	Transistor 2SC 1648	1
Q208	203 5 5100 69351	Transistor 2SC 693 or	1
Q208	4 2039 70310	Transistor 2SC 1648R	1
Q109	203 5 5100 69351	Transistor 2SC 693 or	1
Q109	4 2039 70310	Transistor 2SC 1648	1
Q209	203 5 5100 69351	Transistor 2SC 693 or	1
Q209	4 2039 70310	Transistor 2SC 1648	1
Q110	203 5 5100 69351	Transistor 2SC 693 or	1
Q110	4 2039 70310	Transistor 2SC 1648	1
Q210	203 5 5100 69351	Transistor 2SC 693 or	1
Q210	4 2039 70310	Transistor 2SC 1648R	1
Q102	203 5 5100 69352	Transistor 2SC 693 or	1
Q102	4 2039 70310	Transistor 2SC 1648	1
Q202	203 5 5100 69352	Transistor 2SC 693 or	1
Q202	4 2039 70310	Transistor 2SC 1648	1
Q107	203 5 5100 69352	Transistor 2SC 693 or	1
Q107	4 2039 70310	Transistor 2SC 1648	1
Q207	203 5 5100 69352	Transistor 2SC 693 or	1
Q207	4 2039 70310	Transistor 2SC 1648	1
Q101	203 5 7200 70162	Transistor 2SA 701 or	1
Q101	4 2039 70320	Transistor 2SA 828	1
Q201	203 5 7200 70162	Transistor 2SA 701 or	1
Q201	4 2039 70320	Transistor 2SA 828R	1
Q106	203 5 7200 70162	Transistor 2SA 701 or	1
Q106	4 2039 70320	Transistor 2SA 828R	1
Q206	203 5 7200 70162	Transistor 2SA 701 or	1
Q206	4 2039 70320	Transistor 2SA 828	1
Q111	206 5 4946 04010	IC LD 6040	1
Q211	206 5 4946 04010	IC LD 6040	1
VR CONTROL PCB ASSY			
	4 1329 71910	Circuit Volume	1
VR03	4 2229 70920	Control Volume	1
VR04	4 2229 70920	Control Volume	1
VR01	4 2229 71180	Control Volume	1
VR02	4 2229 71180	Control Volume	1
R152	RD5 6 2251 KV000	Carbon 5.6K ohm 10% 1/4W	1
R252	RD5 6 2251 KV000	Carbon 5.6K ohm 10% 1/4W	1

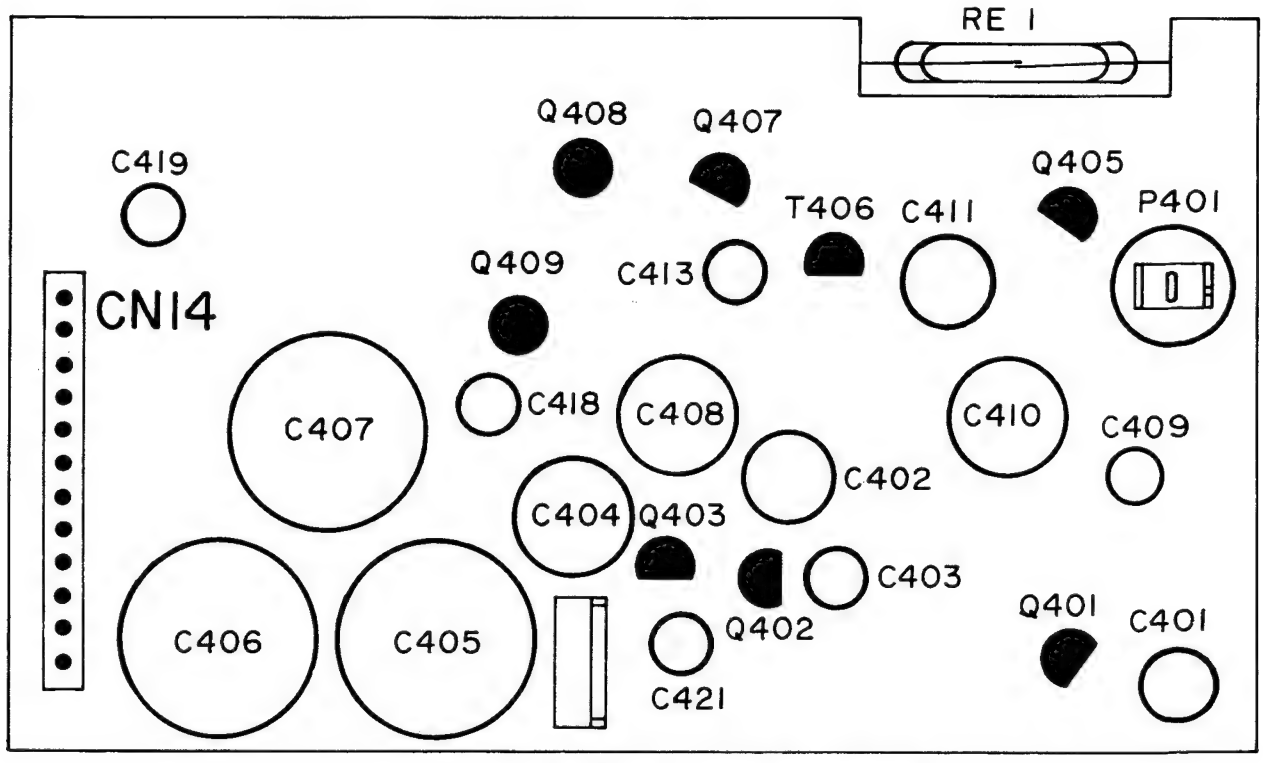
PARTS LIST

Key No.	Part No.	Description	Q'ty
SUB CIRCUIT PCB ASSY			
	4 1329 71900	Sub Circuit PCB Assy	1
P303	4 2229 72650	Potentiometer	1
P304	4 2229 72650	Potentiometer	1
P107	4 2229 72660	Potentiometer	1
P108	4 2229 72660	Potentiometer	1
P206	4 2229 72660	Potentiometer	1
P207	4 2229 72660	Potentiometer	1
P208	4 2229 72660	Potentiometer	1
P106	4 2229 72660	Potentiometer	1
OSC1	4 2589 71040	OSC Block	1
L208	4 2729 70010	Peaking Coil	1
L206	4 2729 70010	Peaking Coil	1
L108	4 2729 70010	Peaking Coil	1
L106	4 2729 70010	Peaking Coil	1
L205	4 2729 70030	Peaking Coil	1
L105	4 2729 70030	Peaking Coil	1
L207	4 2729 70080	Peaking Coil	1
L107	4 2729 70080	Peaking Coil	1
C307	CC1 0 1500 KD00C	Ceramic 100pF ±10% 50V	1
C308	CC1 0 1500 KD00C	Ceramic 100pF ±10% 50V	1
C186	CC2 2 1500 KD00C	Ceramic 220pF ±10% 50V	1
C286	CC2 2 1500 KD00C	Ceramic 220pF ±10% 50V	1
C192	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C184	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C284	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C292	CD1 0 6160 0000V	Electrolytic 10mF 16V	1
C189	CD4 7 6250 0000V	Electrolytic 47mF 25V	1
C289	CD4 7 6250 0000V	Electrolytic 47mF 25V	1
C282	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C280	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C180	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C182	CD4 7 663A 0000V	Electrolytic 47mF 6.3V	1
C181	CM1 0 3500 K00SV	Mylar 0.01mF ±10% 50V	1
C281	CM1 0 3500 K00SV	Mylar 0.01mF ±10% 50V	1
C183	CM2 2 3500 K00SV	Mylar 0.022mF ±10% 50V	1
C283	CM2 2 3500 K00SV	Mylar 0.022mF ±10% 50V	1
C179	CM2 7 3500 K00SV	Mylar 0.027mF ±10% 50V	1
C279	CM2 7 3500 K00SV	Mylar 0.027mF ±10% 50V	1
R285	RD1 5 4251 KV000	Carbon 150K ohm ±10% 1/4W	1
R185	RD1 5 4251 KV000	Carbon 150K ohm ±10% 1/4W	1
R188	RD2 2 2251 KV000	Carbon 2.2K ohm ±10% 1/4W	1
R288	RD2 2 2251 KV000	Carbon 2.2K ohm ±10% 1/4W	1
R191	RD2 7 3251 KV000	Carbon 27K ohm ±10% 1/4W	1
R286	RD2 7 3251 KV000	Carbon 27K ohm ±10% 1/4W	1
R291	RD2 7 3251 KV000	Carbon 27K ohm ±10% 1/4W	1
R292	RD2 7 3251 KV000	Carbon 27K ohm ±10% 1/4W	1
R293	RD2 7 3251 KV000	Carbon 27K ohm ±10% 1/4W	1
R192	RD2 7 3251 KV000	Carbon 27K ohm ±10% 1/4W	1
R193	RD2 7 3251 KV000	Carbon 27K ohm ±10% 1/4W	1
R186	RD2 7 3251 KV000	Carbon 27K ohm ±10% 1/4W	1
R290	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R190	RD3 3 2251 KV000	Carbon 3.3K ohm ±10% 1/4W	1
R189	RD4 7 2251 KV000	Carbon 4.7K ohm ±10% 1/4W	1
R289	RD4 7 2251 KV000	Carbon 4.7K ohm ±10% 1/4W	1
R294	RD8 2 2251 KV000	Carbon 8.2K ohm ±10% 1/4W	1
R287	RD8 2 2251 KV000	Carbon 8.2K ohm ±10% 1/4W	1
R194	RD8 2 2251 KV000	Carbon 8.2K ohm ±10% 1/4W	1

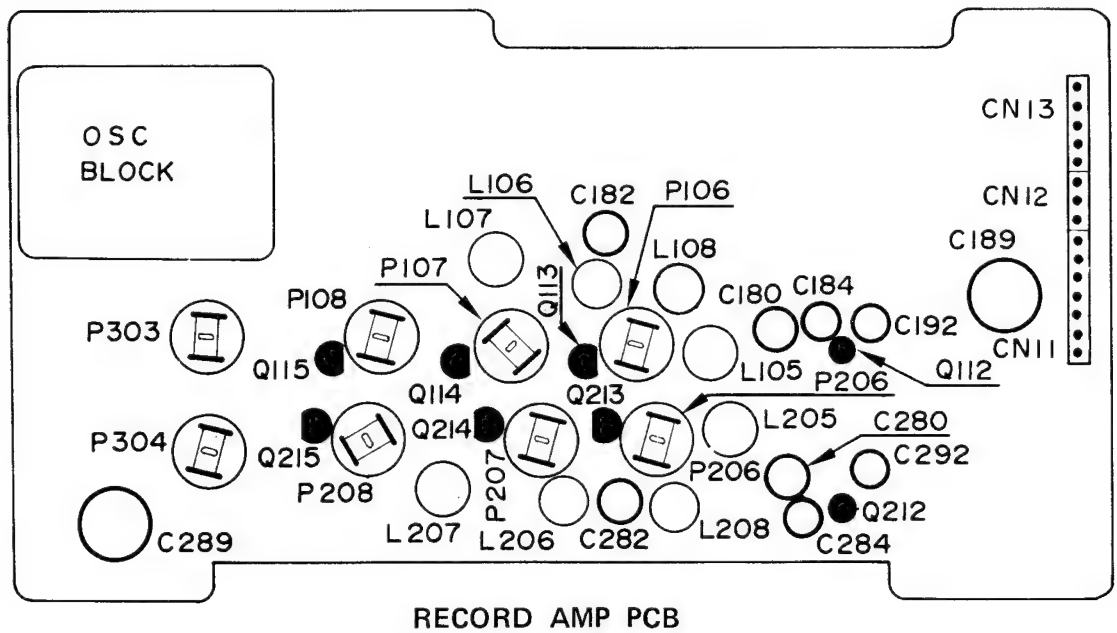
Key No.	Part No.	Description	Q'ty
SUB CIRCUIT PCB ASSY			
R187	RD8 2 2251 KV000	Carbon 8.2K ohm ±10% 1/4W	1
R296	RD8 2 3251 KV000	Carbon 82K ohm ±10% 1/4W	1
R196	RD8 2 3251 KV000	Carbon 82K ohm ±10% 1/4W	1
Q113	203 5 5100 53640	Transistor 2SC 536D	1
Q213	203 5 5100 53640	Transistor 2SC 536D	1
Q114	203 5 5100 53640	Transistor 2SC 536D	1
Q214	203 5 5100 53640	Transistor 2SC 536D	1
Q115	203 5 5100 53640	Transistor 2SC 536D	1
Q215	203 5 5100 53640	Transistor 2SC 536D	1
Q112	203 5 5100 69351	Transistor 2SC 693E	1
Q212	203 5 5100 69351	Transistor 2SC 693E	1
CABINET			
	141 0 1119 25200	Cabinet Assy Top	1
	141 0 1249 06400	Lid Assy Cassette	1
	141 0 1539 00100	Cover Assy Head	1
	141 2 2419 13000	Cloth Switch	5
	141 2 4219 05300	Screw Washer	2
	141 2 7519 17000	Shaft, Lid Cassette	1
	141 2 8519 39900	Spring, Lid Cassette	1
	141 0 1119 25300	Wooden Cabinet Assy	1
	141 2 1419 05800	Rating Plate	1
	141 2 1539 07100	Panel, Jack	1
	141 2 1749 01800	Leg, Rubber	4
	141 2 2419 13200	Cover, Trans	1
	141 6 4559 00100	Serial No Sheet	1
	141 6 4729 14200	Label, Dolby Calib	1
	141 6 4749 01400	Label, Dolby	1
	141 0 1639 04700	Knob ASSY, Calib R	1
	141 0 1639 04800	Knob ASSY, Calib L	1
	141 0 1649 01000	Knob ASSY, Volume	1
	141 2 1649 07200	Knob Slide Switch	3
ACCESSORY			
	4 2369 70360	Plug, Adaptor	1
	4 2369 70370	Plug, Adaptor	1
	4 2369 70470	Cord, DIN to DIN	1
	4 2419 73810	Cassette	1
	141 6 4119 43800	Instruction Manual	1
	141 6 4729 01900	Label Caution	1
PACKAGE			
	141 2 3529 10600	Stopper Cassette	1
	141 6 1419 22900	Individual Carton	1
	141 6 1429 09100	Box, Accessory	1
	141 6 1449 32500	Case, Styrofoam	2
	141 6 2519 07014	Poly Cover 70 x 140, Plug	1
	141 6 2519 13027	Poly Cover 130 x 270, AC Cord	1
	141 6 2519 20025	Poly Cover 200 x 250, Accessory	1
	141 6 2519 50070	Poly Cover 500 x 700, Unit	1
	141 6 4559 00100	Serial No Sheet	2
	141 6 4729 14500	Label Accessory	1

EXPLODED VIEW (CABINET)



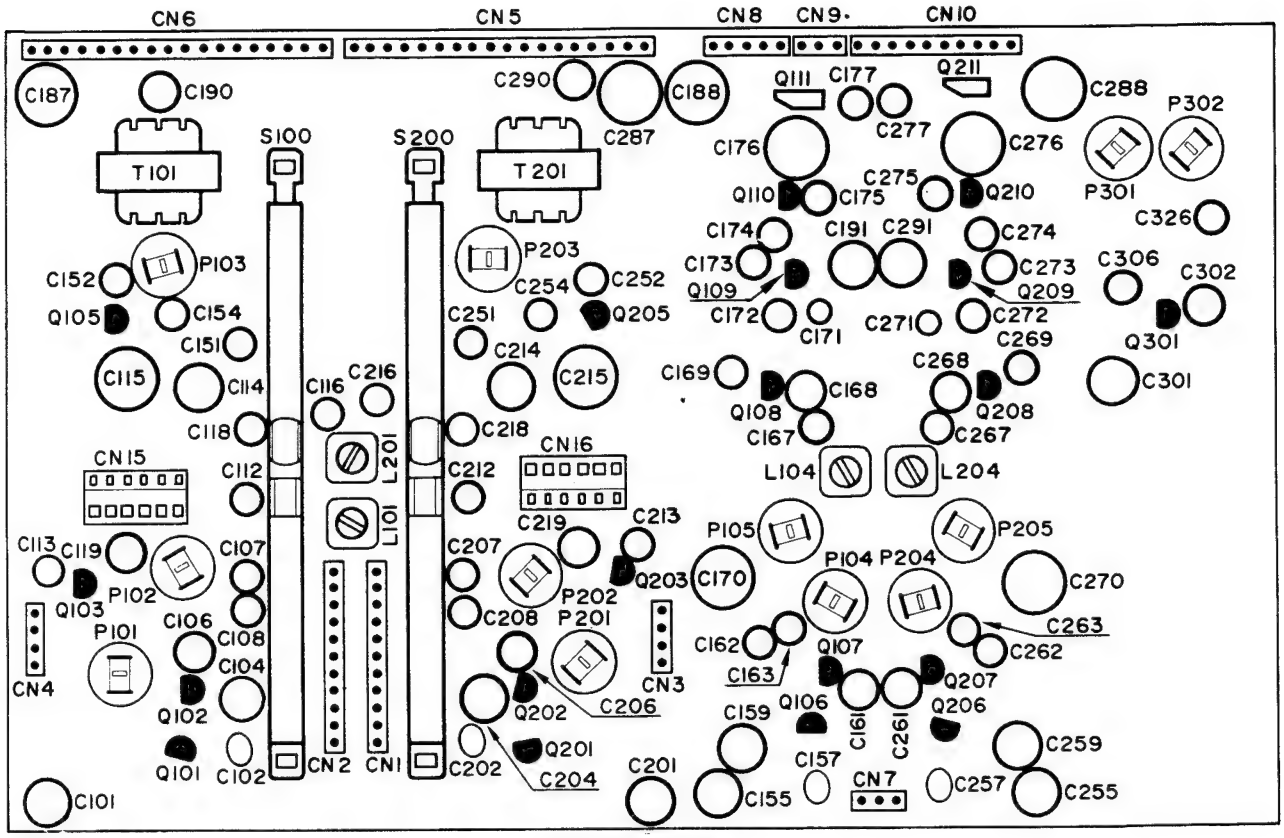


CONTROL PCB

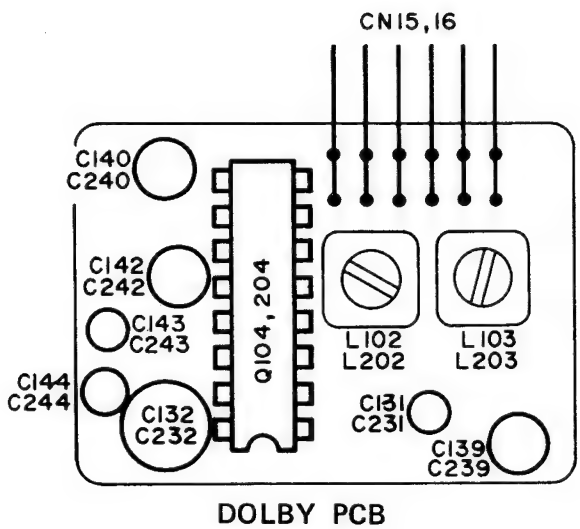


RECORD AMP PCB

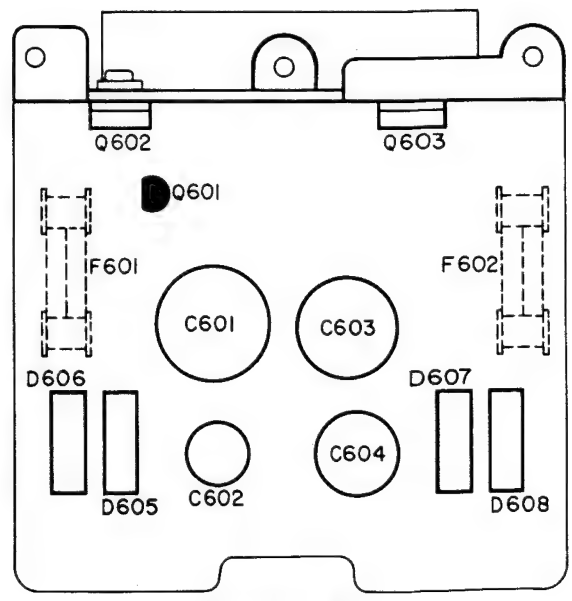
PARTS LOCATION



AUDIO PCB

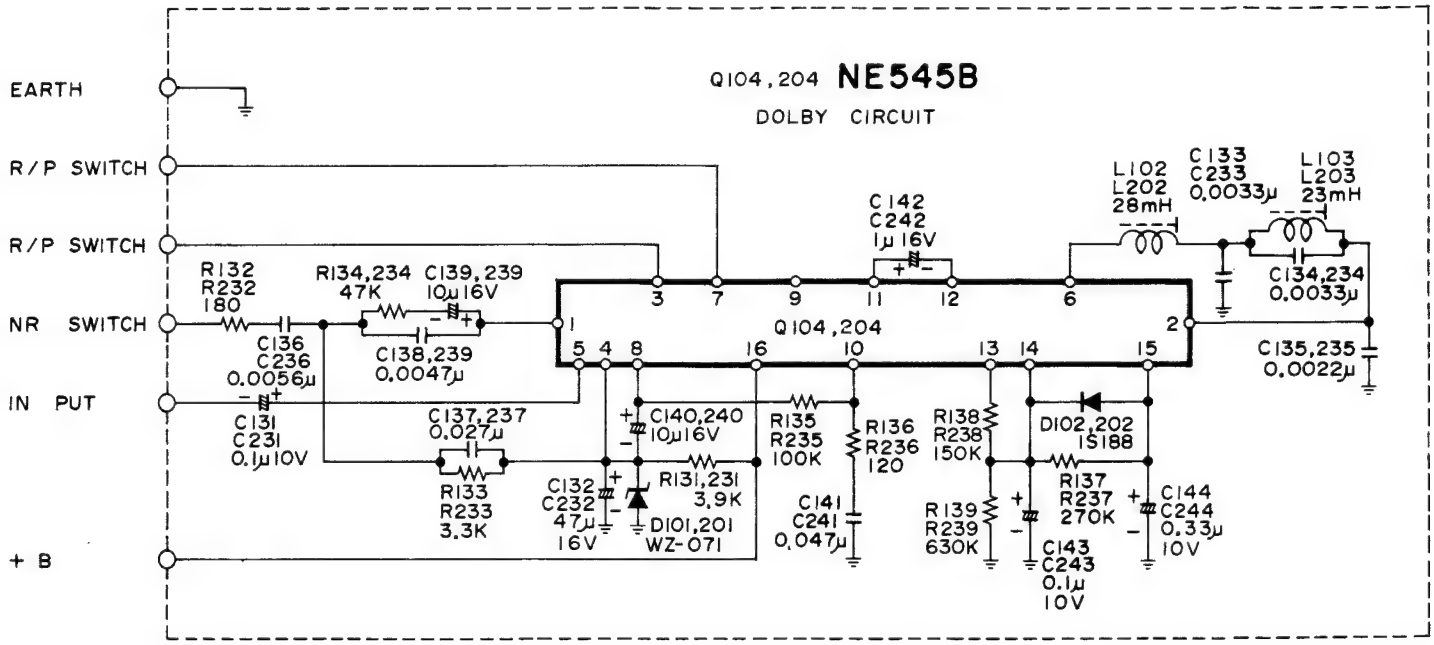


DOLBY PCB

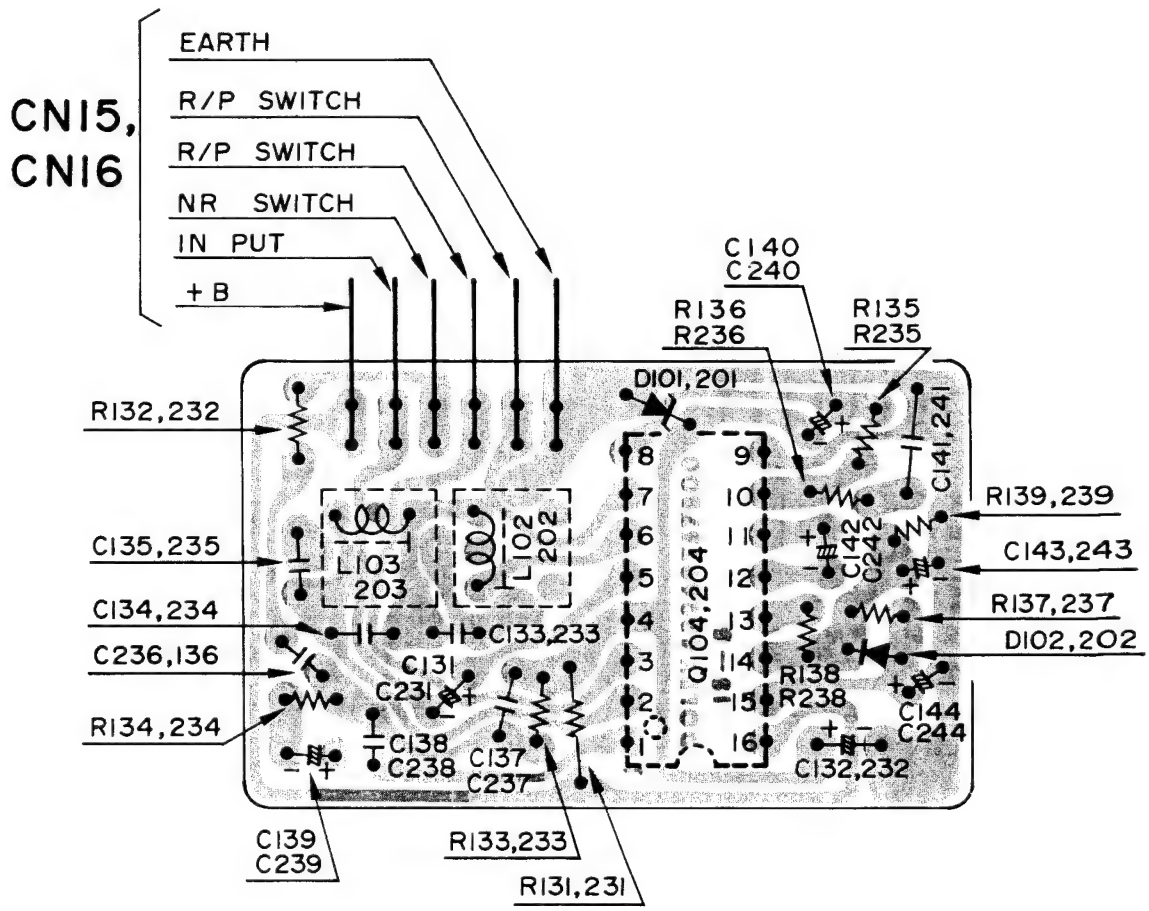


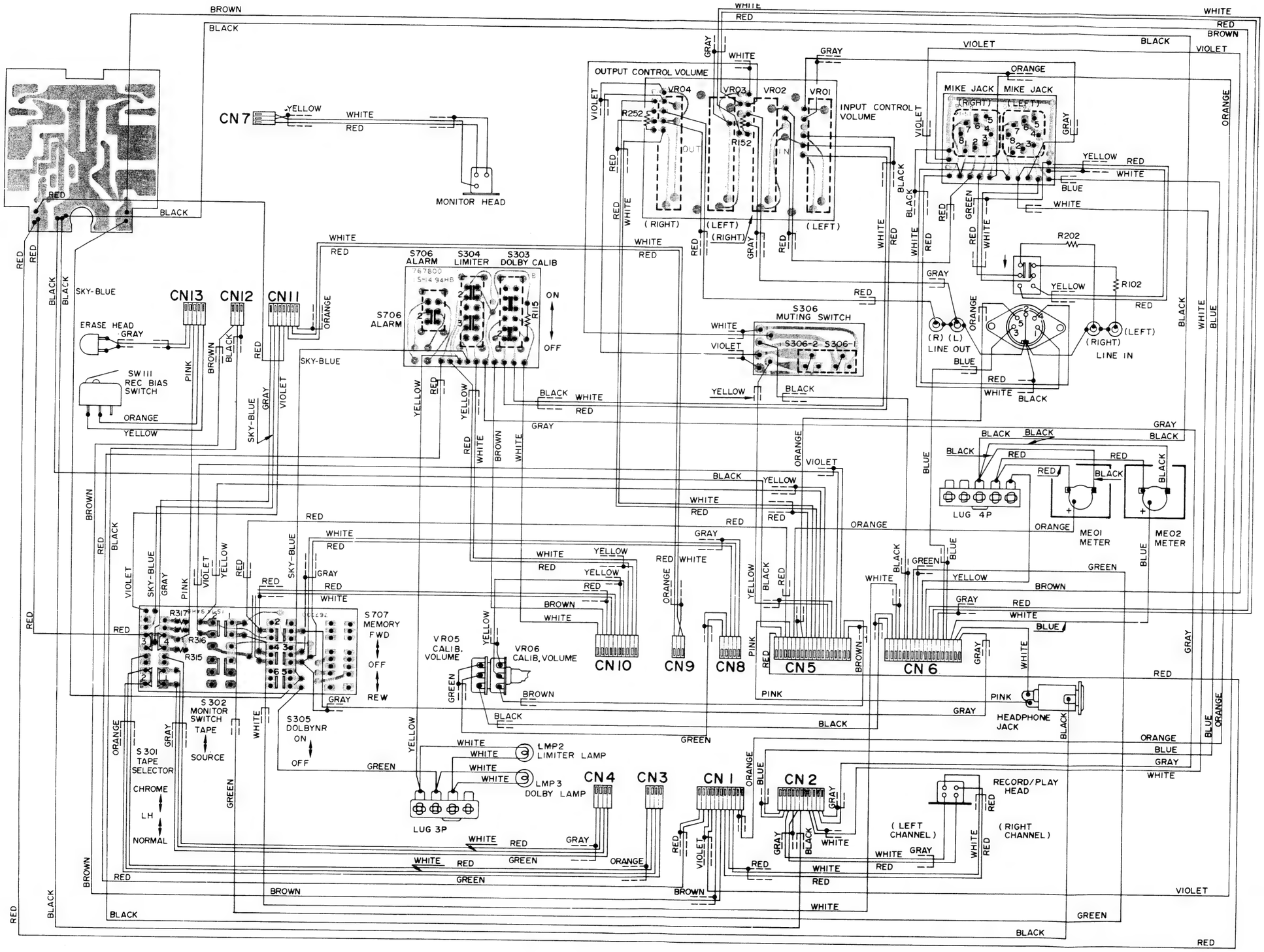
POWER PCB

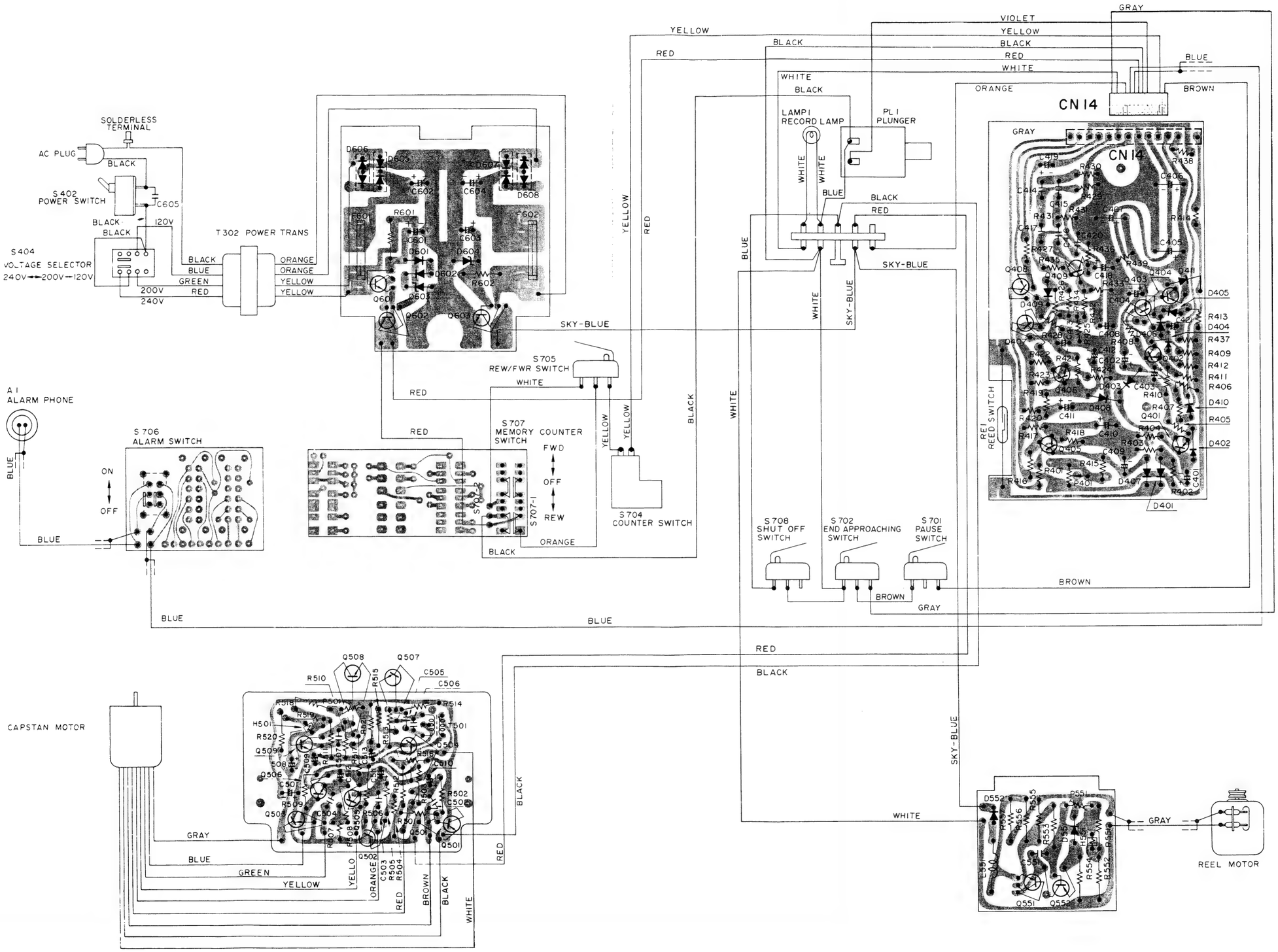
SCHEMATIC DIAGRAM (DOLBY CIRCUIT)



WIRING DIAGRAM (DOLBY CIRCUIT)




CN7
YELLOW
WHITE
RED
MONITOR HEAD
OUTPUT CONTROL VOLUME
VR04
VR03
VR02
VR01
R252
R152
INPUT CONTROL VOLUME
(RIGHT)
(LEFT)
MIKE JACK
(RIGHT)
(LEFT)
R202
R102
(R) (L)
LINE OUT
(RIGHT) (LEFT)
LINE IN
S706 ALARM
S304 LIMITER
S303 DOLBY CALIB
ON
OFF
S706 ALARM
S306 MUTING SWITCH
S306-2 S306-1
CN13
CN12
CN11
ERASE HEAD
SW111 REC BIAS SWITCH
SKY-BLUE
ORANGE
YELLOW
PINK
BROWN
BLACK
GRAY
VIOLET
RED
WHITE
GREEN
BLUE
LUG 4P
ME01 METER
ME02 METER
S707 MEMORY FWD
OFF
REW
VR05 CALIB. VOLUME
VR06 CALIB. VOLUME
S302 MONITOR SWITCH TAPE
SOURCE
S305 DOLBYNR ON
OFF
S301 TAPE SELECTOR
CHROME
LH
NORMAL
LMP2 LIMITER LAMP
LMP3 DOLBY LAMP
LUG 3P
CN10
CN9
CN8
CN5
CN6
CN4
CN3
CN1
CN2
HEADPHONE JACK
RECORD/PLAY HEAD
(LEFT CHANNEL)
(RIGHT CHANNEL)


SOLDERLESS TERMINAL
AC PLUG
BLACK
S402 POWER SWITCH
C605
BLACK
120V
BLACK
S404 VOLTAGE SELECTOR
240V 200V 120V
200V
240V
T302 POWER TRANS
BLACK
BLUE
GREEN
RED
ORANGE
ORANGE
YELLOW
YELLOW
D606
D605
D607
C602
C604
D608
R601
C601
C603
D601
D604
D602
R602
D603
Q601
Q602
Q603
SKY-BLUE
S705 REW/FWR SWITCH
WHITE
RED
A1 ALARM PHONE
BLUE
S706 ALARM SWITCH
ON
OFF
OFF
BLUE
RED
S707 MEMORY COUNTER SWITCH
FWD
OFF
REW
S707-1
S707-2
ORANGE
BLACK
YELLOW
YELLOW
S704 COUNTER SWITCH
YELLOW
RED
BLACK
WHITE
BLUE
WHITE
BLACK
LAMP1 RECORD LAMP
PL1 PLUNGER
WHITE
WHITE
BLUE
BLACK
RED
SKY-BLUE
WHITE
SKY-BLUE
S708 SHUT OFF SWITCH
S702 END APPROACHING SWITCH
S701 PAUSE SWITCH
BROWN
GRAY
VIOLET
YELLOW
BLACK
RED
WHITE
BLUE
ORANGE
BROWN
CN14
GRAY
CN14
D405
R413
D404
R437
R409
R412
R411
R406
D410
R405
D402
D401
REI REED SWITCH
BROWN
BLUE
BLUE
RED
BLACK
SKY-BLUE
CAPSTAN MOTOR
Q508
Q507
R510
R515
C505
C506
R514
T501
H501
R520
Q509
Q510
Q506
C501
R509
Q505
R502
C502
Q504
R506
Q501
Q502
C503
R505
R504
GRAY
BLUE
GREEN
YELLOW
YELLO
ORANGE
RED
BROWN
BLACK
WHITE
RED
BLACK
WHITE
D552
R555
R551
R556
R553
D551
R554
R552
Q551
Q552
GRAY
REEL MOTOR

Q101 2SA701 Q102 2SC693
PRE AMP

Q103 2SC693
PRE AMP

LEFT CH. MIKE JACK

R/P HEAD

P/B GAIN ADJ.

P/B FRE. RES ADJ.

INPUT VOLUME

(LEFT) LINE IN

Q106 2SA701 Q107 Q108 2SC693
MONITOR AMP

Q109, Q112 2SC693 RECORD AMP

MONITOR HEAD

MONITOR GAIN. ADJ.

MONITER FRE. RES ADJ.

VR 5 B-20K CLIB VOLUME

Q201 2SA701 Q202 2SC693
PRE AMP

Q203 2SC693
PRE AMP

RIGHT CH. MIKE JACK

R/P HEAD

P/B GAIN ADJ.

P/B FRE. RES ADJ.

INPUT VOLUME

(RIGHT) LINE IN

Q206 2SA701 Q207 Q208 2SC693
MONITOR AMP

Q209, Q212 2SC693 RECORD AMP

MONITOR HEAD

MONITOR GAIN. ADJ.

MONITER FRE. RES ADJ.

VR 6 B-20K CLIB VOLUME

Q401, Q402 2SC536 Q403 2SA659 Q404 2SB511
CONTROL CIRCUIT

Q501~Q503 2SB544 Q504~Q509 2SC
CAPSTAN MOTOR GOVERNOR

MA 1 SUPPLY REEL MAGNET

RE 1 REED SWITCH

S707 FWD — OFF — REW

S704 COUNTER SWITCH

PL 1 PLUNGER

P501 B-2K TAPE SPEED ADJ.

Q405 Q406 2SC536 Q407 2SA659 Q408 Q409 2SB187
END APPROACHING ALARM CIRCUIT

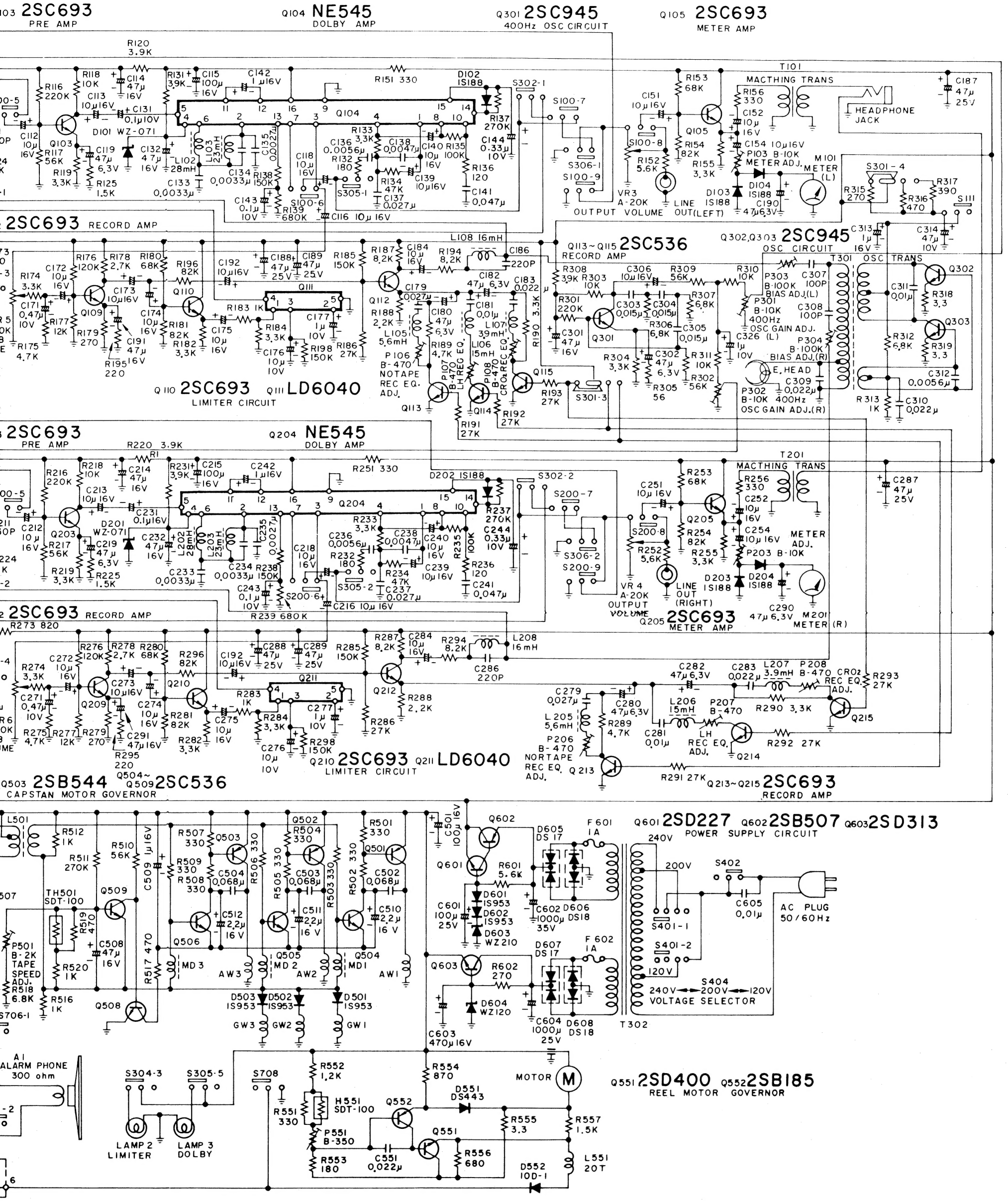
END APPROACHING ALARM TIME ADJ. P401 B-100K

LAMP 1 RECORD LAMP

A1 ALARM PHONE 300 ohm

LAMP 2 LIMITER

RD 4545 SCHEMATIC DIAGRAM



WM-1306

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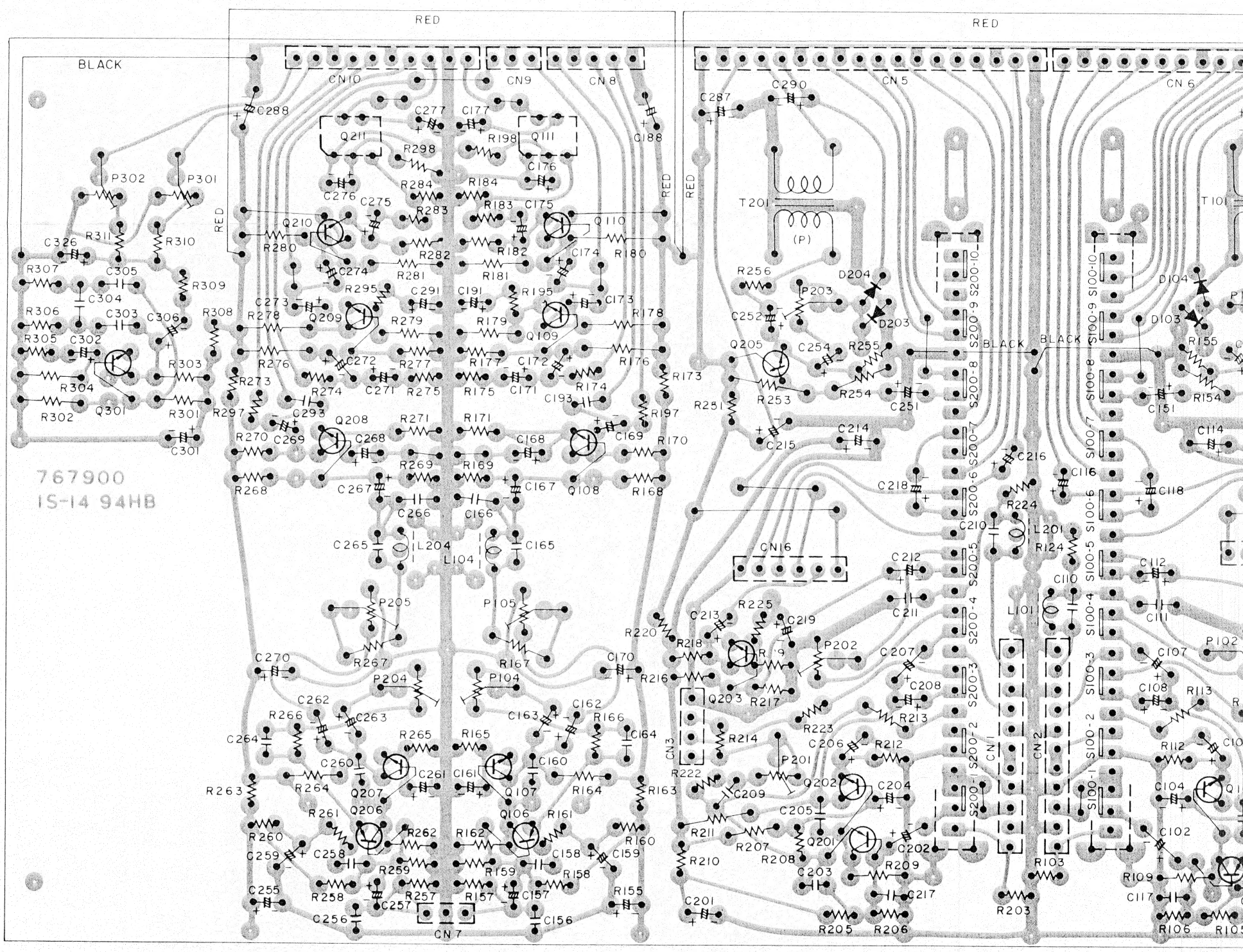
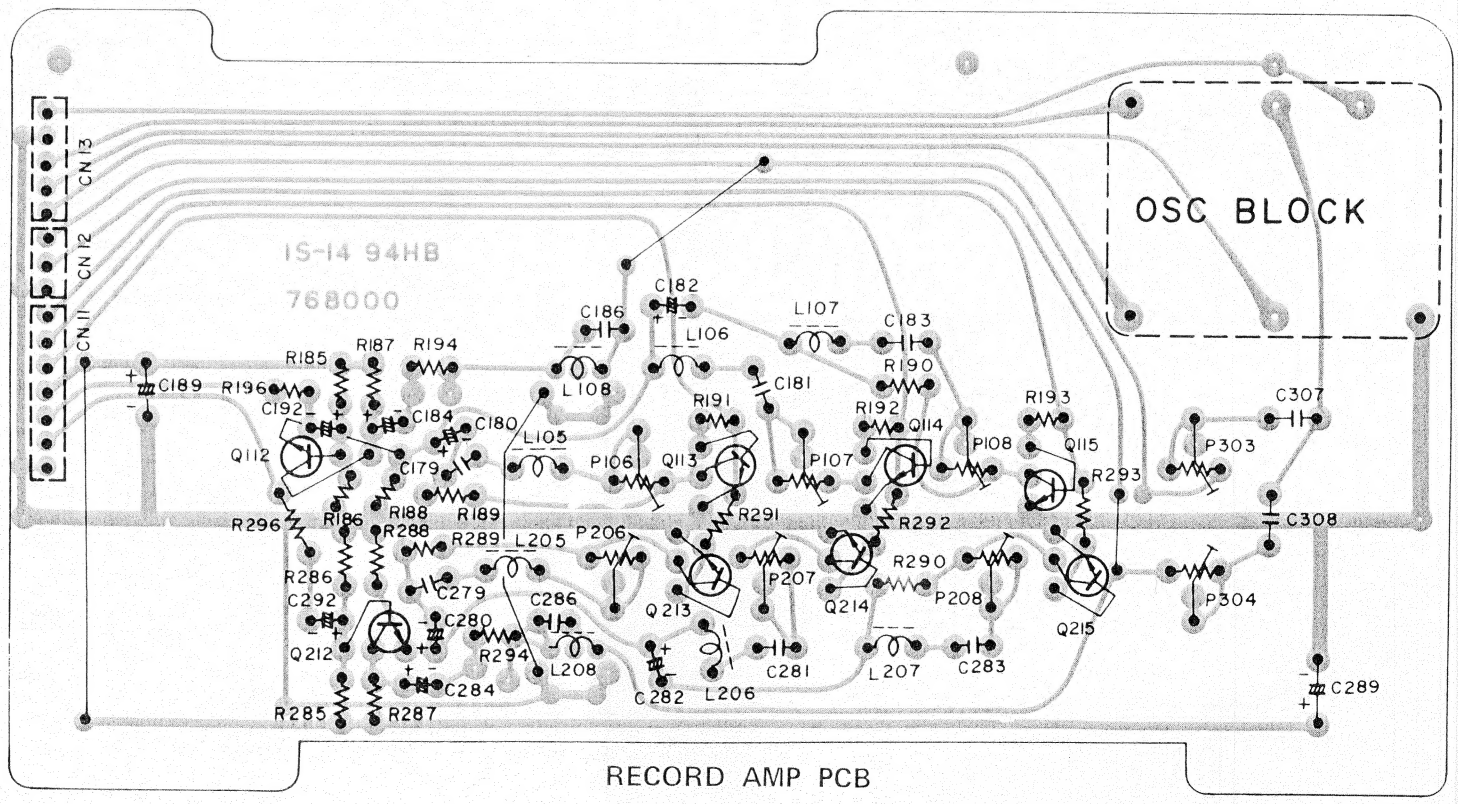
RD 4545 WIRING DIAGRAM



AUDIO AMP PCB



RECORD AMP PCB

RD 4545 WIRING DIAGRAM